MEMOIRS OF THE ARCHÆOLOGICAL SURVEY OF INDIA

No. 42

An Archaeological tour in Upper Swāt and Adjacent Hill Tracts

BY

SIR AUREL STEIN, K.C.I.E.,
Archæological Survey of India (ret.), Fellow of the British Academy, etc.

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AN ARCHÆOLOGICAL TOUR IN UPPER SWĀT AND ADJACENT HILL TRACTS

INTRODUCTORY.

The present report is intended to record the archæological results of an exploratory tour which the sanction by the Government of India of a proposal submitted by me with the ready support of Sir John Marshall enabled me to carry out from March to May, 1926, in the territories now subject to Miāngul Gul Shāhzāda, Ruler of Swāt. In my Personal Narrative of this tour recently published with the permission of Government [1] I have had occasion fully to indicate the reasons which ever since the early years of my work in India had forcibly drawn me towards this region hitherto inaccessible to European research. There too I have described the recent developments of 'tribal politics' which rendered it possible for me with the ready assent and under the protection of the Ruler of Swāt to realize the hope of explorations aimed at for over thirty years. Here it may suffice briefly to mention the essential facts which render this portion of the ground beyond the administrative border of the Indian North-West Frontier of special historical and antiquarian interest, and to refer to my previous endeavours to approach it for the purposes of archæological exploration.

Antiquarian interest of Swāt.—It has been recognized long ago that the fertile valleys drained by the Swāt river, together with the adjacent territory of Bunēr to the south-east, correspond to the ancient *Uḍḍiyāna* or *Udyāna*, to use the Sanskrit designation rendered familiar through an old popular etymology.[2] The great fame attaching to this country in Buddhist tradition is amply attested by the records of the Chinese Buddhist pilgrims who eagerly visited its numerous sacred sites, as well as by manifold notices in the literature of Northern Buddhism. The worship and culture flourishing here for centuries were long ago known to have left behind their traces in numerous ruins. Some of them had been exploited during recent times through 'irresponsible digging' for

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[1] *On Alexander's Track to the Indus*, by Sir Aurel Stein, Macmillan & Co., London-New York, 1929.

[2] The researches of Professor F. W. Thomas and M. Sylvain Lévi have demonstrated the true form of the name as attested by Buddhist Sanskrit texts to have been *Uḍḍiyăna* or *Oḍḍiyăna*; cf. J. R. A. S., 1905, p. 461; *Journal Asiatique*, 1915, i. pp. 105 sqq. M. Sylvain Lévi in the latter article has convincingly shown that the form *Udyāna*, the 'Garden,' commonly accepted as the Sanskrit name of Swāt is but an *idolum libri*, based upon a 'learned popular etymology'. A gloss on the notice of Swāt in Hsüan-tsang's *Hsi-yü-chi* first records it.

sculptures; but all those in Upper Swāt had remained unsurveyed. For the historical student this region derives an additional interest, and one likely to appeal to a wider public, from the fact that it can be shown to have been the scene of important events in that arduous campaign by which Alexander the Great prepared his way west of the Indus for the triumphant invasion of the Panjāb.

The geographical facts which account for Alexander's passage through Swāt and for the subsequent extension of his exploits to the hills lying east of it towards the Indus have been fully discussed by me in the first chapter of *Serindia* [3] and in my paper on 'Alexander's campaign on the Indian North-West Frontier.'[4] The latter first set forth in detail the light thrown by my explorations of 1926 on the localities which formed the scenes of the chief events of that campaign, as recorded in the classical accounts that have come down to us. But long before these explorations became possible I had endeavoured to reach that ground where alone a solution of much discussed antiquarian questions could be sought. After the Chitrāl campaign of 1895 had brought the route leading across the Malakand pass towards Dīr, together with a comparatively small portion of Lower Swāt, under British protection, I was enabled through the help of the late Colonel (subsequently Sir Harold) Deane to pay rapid visits during my scanty Christmas holidays of 1896 and 1897 to such ruins of Buddhist shrines and other ancient remains as could be examined there. Through the support of the same kind friend I was permitted in January 1898 to accompany the field force under General Sir Bindon Blood on the punitive expedition into Bunēr and to use this opportunity for an archæological survey of the chief ancient sites there traceable.[5]

Search for Aornos.—In 1904 Sir Harold Deane, as first Chief Commissioner of the newly created North-West Frontier Province, through tribal arrangements made it possible for me as the first European to visit and survey the heights of Mahāban.[6] There a conjecture first put forward by General Abbott fifty years before and widely accepted had proposed to locate the rock stronghold of Aornos, the scene of Alexander's most famous exploit west of the Indus. Careful examination on the spot proved that the topographical features of this massif could not be reconciled with the details of the celebrated military feat as recorded in the classical accounts. To search for its scene higher up on the right bank of the Indus, as suggested by various considerations, was rendered impossible by the state of 'tribal politics' prevailing then and for years after. On the start for my second Central-Asian expedition in 1906 I was, however, able to take my way towards Chitrāl and the Pāmīrs by the route leading past Malakand, Chakdara and Dīr and thus to cross the ground between the Panjkōra and Swāt rivers which must have seen the Macedonian columns pass by.[7]

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[3] *See Serindia*, i. pp. 2 sqq.

[4] Cf. *Geographical Journal*, 1927, November-December, pp. 417 sqq.; in particular pp. 423 sq.

[5] Cf. *Detailed Report of an Archæological Tour with the Buner Field Force*, Lahore, Punjab Government Press, 1898; also reprinted in the 'Indian Antiquary,' January-March, 1899.

[6] Cf. Stein, *Report on Archæological Survey Work in the N. W. Frontier Province and Balūchistan*, Peshawar, N. W. F. P. Government Press, 1905, pp. 19-31.

[7] See *Serindia*, i. pp. 2 sqq., 21 sq.

After I had returned from my third Central-Asian expedition (1913-16) and the strain experienced on the Frontier during the world war had passed by, I made a fresh attempt in 1921 to reach ground on the Upper Swāt river and Indus hitherto closed to research. The attempt was prompted by a suggestion my lamented friend Colonel R. A. Wauhope, R.E., of the Survey of India, had made regarding a possible location of Aornos on a high spur which descends from the Swāt-Indus watershed opposite to the Black Mountains. My hope of testing that suggestion by actual exploration was frustrated for some time by the political situation, more than usually disturbed, which had arisen in that region through struggles for the possession of Swāt on the part of the neighbouring chiefs of Amb and Dīr. But in the spring of 1925, while on deputation in England, I renewed my request in a letter addressed to the Honourable Sir Norman Bolton, K.C.I.E., Chief Commissioner of the North-West Frontier Province.

Miāngul 'Bādshah's' rise to power.—Fortunately by then the outlook had greatly improved through the rise to undisputed power in Swāt of a very capable ruler in the person of Miāngul 'Abdul Wadūd Gul Shāhzāda, the only surviving grandson of the great Ākhund of Swāt. Having driven out the invading forces of both those chiefs he was soon able to extend his sway also to Bunēr, to the lower portion of the Swāt Kohistān, and to the valleys of Ghōrband, Kāna, Chakēsar and Pūran which lie between the Swāt watershed and the Indus. It was fortunate, too, that the political relations with Swāt were then in charge of my old and ever helpful friend Colonel E. H. S. James, C.I.E., Political Agent for Dīr, Swāt and Chitrāl. Acting under the instructions kindly given by Sir Norman Bolton, and himself as always interested in my archæological aims, Colonel James was able largely through his personal influence with the Miāngul 'Bādshāh' to secure his approval for my intended visit and for the researches I was anxious to carry out there.

Once his approval had been given, the Ruler of Swāt, as which he has since been formally recognized, showed his truly enlightened spirit by readily allowing me to extend my explorations over most of his territories instead of the comparatively small area to which my original request had applied. He generously used all resources at his disposal to facilitate my labours and to assure to me free and safe movement on ground hitherto closed to Europeans. In the same way he willingly assented to my archæological investigations being accompanied also by such topographical surveys as this ground, but imperfectly known before from native route reports and the like, necessarily called for. It was no small privilege for me to be enabled to spend two and a half months over antiquarian and geographical work in a region which presents exceptional interest to the historical student and which for the most part had never been visited by a European since ancient times. For all these advantages and much kind hospitality besides I wish to record here my sincerest gratitude to the Ruler of Swāt.

Assistance for tour.—I must offer here my warm thanks also to those on the British side from whom I received all needful help for the execution

of my plan. They are due in the first place to the Government of India in the Education Department which on the recommendation of Sir John Marshall, Kt., C.I.E., Director General of Archæology, sanctioned my employment on the proposed tour and a grant of Rs. 2,000 to meet its incidental expenses, and to Colonel W. J. Keen, C.I.E., C.B.E., who, as Officiating Chief Commissioner of the N. W. Frontier Province, greatly encouraged me by his kind personal interest in the enterprise. Mr. H. J. Metcalfe, I.C.S., M.V.O., Political Agent, Dīr, Swāt and Chitrāl, greatly assisted me in my tasks by useful advice and many proofs of friendly care both before and after my start from his headquarters on the Malakand.

To the Survey of India Department I feel greatly indebted for the important help which as on many former occasions it accorded to me by providing a fully trained and extremely hard-working topographical assistant in the person of Surveyor Tōrabāz Khān. The plane-table surveys on the scale of two miles to the inch which he carried in the course of our travel over a total area of some 1,800 square miles, at times under considerable physical difficulties, are embodied in the accompanying skeleton map of Swāt and Adjacent Tracts. To his unwearying efforts are due also the detailed map of the Pīr-sar area and the plans of the ancient hill strongholds near Bīr-kōṭ and Uḍegrām prepared under my direct personal supervision. For the careful reproduction of the above maps at the Geodetic Survey Office, Dehra Dun, my thanks are due to Colonel H. T. Morshead, R.E. In connexion with practical archæological work I derived very useful help from the devoted exertions of Naik Abdul Ghafūr, the capable 'handy-man' whose services with the approval of the military authorities had been lent to me by that distinguished Corps, K. G. O. Bengal Sappers and Miners.

Publication of results.—If in the present report I shall be able to restrict myself to a record of the purely archæological results of my tour, this is mainly due to two previous publications. In Chapter I of *Serindia*, the report one my second Central-Asian expedition, I have had already occasion fully to discuss all date bearing on the ancient history and geography of Swāt and the neighbouring region which are preserved for us in Sanskrit and classical texts or more plentifully furnished by the extant narratives of Buddhist pilgrims from China. My personal narrative of the tour to which reference has been made before, has afforded adequate opportunity to record such geographical, ethnographic and other observations of a more general character bearing on the present conditions of this region as may help to throw light on its past. My paper on 'Alexander's Campaign on the Indian North-West Frontier', published with the permission of Government in the *Geographical Journal*, has necessarily anticipated many observations affecting the location of specific sites which figure in the story of Alexander's operations, including the famous Aornos.

Finally I may note that the linguistic materials I collected on the interesting and little known Dardic language spoken in Tōrwāl, the furthermost alpine portion of the Swāt valley to which my tour extended, have been fully worked up by Sir George Grierson, O.M., K.C.I.E., the leading authority on

these languages. They are published with some explanatory notes of mine in his *Sketch of the Tōrwālī Language*, one of the monographs of the Royal Asiatic Society. Similarly the anthropometrical records which I secured among the hillmen of the same and neighbouring tracts have been handed over to Mr. T. D. Joyce, Deputy Keeper of Anthropology, British Museum, for such expert analysis as was carried out by him before in the case of the corresponding materials brought back from my Central-Asian expeditions.

CHAPTER I.—ANCIENT REMAINS IN LOWER SWĀT

SECTION i.—RUINED SITES NEAR THĀNA

On March 9th I started in Mr. Metcalfe's company from the hospitable roof of Government House, Peshawar, for the heights of the Malakand, familiar to me from my early visits to Lower Swāt but not seen again since 1906. On the following morning the car of the same kind host carried me onwards to Thāna, the last large village within the protected area of Lower Swāt on the way to the Miāngul ruler's dominion. From there I proceeded on March 11th, in the direction of the Mōra pass in order to visit the site of a ruined Buddhist sanctuary near the village of Nal. A large quantity of fine Græco-Buddhist sculptures was known to have been excavated there in 1897 for Colonel Deane and subsequently removed to the Imperial Museum, Calcutta. The site does not appear to have been surveyed or described on that occasion ; nor have I been able to trace any published account of the sculptural remains brought to light there.

Remains at Nal.—Nal village is situated about four miles to the south-east of Thāna near the head of a wide and well cultivated valley. On approaching it I was shown a small hillock to the west of the village burial ground where a small Buddhist ruin was said to have been dug up in recent years on behalf of a late Political Agent, and a number of 'Būts', *i.e.*, sculptures, removed. The shrine, for such it appeared to have been, had been completely destroyed in the process. The mound marking its position was locally known by the name of *Khazāna* and had evidently been also before the scene of quarrying for 'treasure' or sculptures.

Ascending the picturesque glen known as Girōban which branches off to the south-east from the one leading to the Mōra pass, we reached at a distance of a little over half a mile the site I was looking for. The top of a small ridge stretching down from N.E. to S.W. proved to be covered with the badly destroyed remains of what evidently had been a considerable Buddhist sanctuary (Fig. 4). Within a debris-covered area of about 76 by 50 yards it was possible to make out the foundations of at least two completely wrecked Stūpas. Broken fragments of relievo panels lay scattered about on the surface or had been built into modern walls supporting terraces of cultivated ground close by. One of the two fragmentary relievos picked up on the surface and subsequently deposited in the Peshawar Museum showed the well-known Jātaka scene of

Gautama Bodhisattva propping up the broken pillar of a building. A separate small ridge to the east bears the remains, also much decayed, of what appears to have been a monastic structure. Below it there issues a fine perennial spring, and this obviously accounts for the choice of the sacred site. From it a delightful view offers on the one side along the fertile valley towards Thāna and on the other up to the fir-clad slopes of the watershed towards the valleys of Palai and Bāzdara visited by me in 1912.

Ruins of Kāfir-kōṭ.—About 150 feet higher up we passed the remains of a massive tower built as a solid square on a large isolated rock, obviously chosen as a place easy of defence. Then a steep climb over rock-strewn slopes to the north-east brought us to a large group of ruined dwellings known as *Kāfir-kōṭ*. They occupy the narrow but fairly level top of a rocky spur running from north to south. This faces the foot of another and larger spur which descends from the peak marked in the half-inch survey sheet with the height of 4,435 feet. The badly decayed walls show masonry of 'Gandhāra type' and belong to ancient dwellings closely resembling those subsequently surveyed on the heights above Kōtāh.[1] A small perennial spring issues under rocks in the gap separating the two spurs just referred to and explains how a site so difficult of access could be occupied by habitations.

Ascending from there by a somewhat easier track we gained the crest of the large spur which separates the valley above Thāna from the one to the east descending towards Kōtāh. From the bold eminence of Dosillo-sar which crowns it I gained the first view of the new ground to be explored within the boundary of Bādshāh's territory. Then a long scramble over a succession of rock-bound ridges and ravines to the S.W. allowed me to reach the fairly flat crest which forms the watershed towards the great Peshawar valley, and on it the narrow gap which forms the Mōra pass. The latter is practicable only for lightly laden ponies and mules. The track descending from it to Nal showed none of the massive supporting walls which distinguish the ancient bridle paths crossing the Charāt, Shāh-kōṭ and Malakand passes and known since the Chitrāl campaign of 1895 as 'Buddhist roads'.

Stūpa of Tōp-dara.—The next day was to bring me within the territory of the Ruler of Swāt, beyond the Landakai spur which marks its western boundary on the left bank of the river. I used the short march from Thāna, done mostly under drizzling rain, to visit the ruined Stūpa which is situated in a small valley opening to the south-east of the village of Haibat-grām. The valley takes its name, *Tōp-dara*, from the ruin. I had seen this Stūpa already in 1897 and well remembered its comparatively fair state of preservation. Leaving Thāna which since the Pax Britannica was extended over Lower Swāt has grown to quite town-like proportions, we reached Haibat-grām by the main road after about a mile and a half. By the side of the torrent bed which descends from Tōp-dara and only half a mile or so to the south of the village I noticed a large mound, measuring about 78 by 60 yards, called *Bābujān*. It marks the position of a completely destroyed Stūpa of which the stone materials are

[1] See below p. 9.

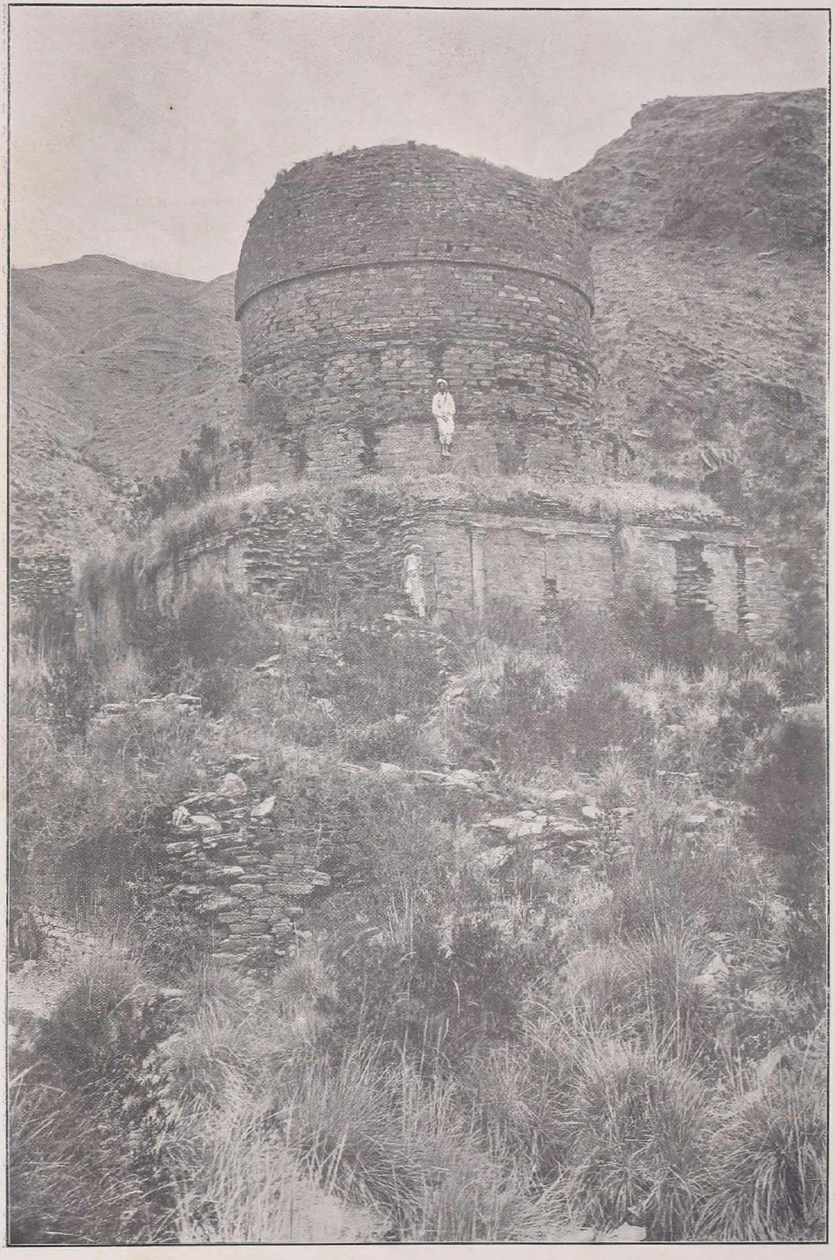

Fig. 1. Buddhist Stūpa of Tōp-dara, above Haibat-grām.

known to have been carried off long ago for use in the dwellings of Haibatgrām and Thāna. The way beyond led over a low and narrow plateau which judging from abundant stone debris must also have once been occupied by dwellings. But only at a spot known as *Damozai*, about half a mile further up and near the entrance of the picturesque glen containing the Tōp-dara Stūpa, could remains of ancient walls built with masonry of Gandhāra type be traced *in situ*.

The ruined Stūpa, seen in Fig. 1, occupies a narrow plateau between two torrent beds which meet close below it. The plateau has been enlarged by stone-built platforms the supporting walls of which, as the foreground in the photograph shows, still stand in places to a height of 12 feet or more. The structural features of the Stūpa, as shown by the sketch plan and section in Pl. 1, are typical of most of the Stūpas examined in Swāt. On a rectangular base measuring 52 by 46 feet and about 13 feet high there rise two circular bases having a diameter of 36½ and 28½ feet, respectively. Their heights are 7 and 6 feet, respectively, including low plinths. Above a projecting cornice of the uppermost base there rises the dome on a drum, 27 feet in diameter. As the top of the dome has been broken its full height could not be ascertained, but it certainly was over 20 feet. The lowest base was provided with stairs, 13 feet wide, on its S.E. side. On that side a broad cutting carried through both upper bases right to the centre showed where treasure-seekers had been at work long ago. All three bases were decorated with pilasters 1 foot broad and projecting 3 inches; but most of these are now marked only by the matrices which their crumbling masonry of small stones has left in the far more solid facing of the Stūpa. This consisted of roughly dressed large slabs, with small flat pieces of stone filling the lateral interstices in the usual Gandhāra fashion and equalizing the courses. There were indications of the whole of the Stūpa having been coated with hard plaster.

On higher ground to the S.E. of the Stūpa, at a distance of about 25 yards, there are found the much decayed remains of a quadrangular structure measuring about 100 feet square. It appears to have comprised on each side four small domed chambers, grouped round an open court. The domes had a span of about 8 feet, and rested with their horizontal courses on carved slabs of stone rounding off the corners of the square chambers. There can be no doubt about this quadrangle having served for monastic quarters. About half a mile up the glen there is found a small perennial spring, and on the steep slope to the S.W., at a height of about 200 feet above the site, there rises boldly a massive high tower of square shape. It may have served as a place of safety for the small monastic community in troubled times.

Ruins near Jalāla.—Moving northward along the slopes towards the village of Jalāla we passed for a distance of over a mile a succession of small detached ridges, all bearing remains of ruined dwellings built with walls of Gandhāra masonry and undoubtedly going back to pre-Muhammadan times. The whole site was said to be known as *Ghwaghawar*, the several ridges being distinguished as Barghōle-ghund, Narai-khpā, Loē-khpā. Everything pointed to

the fertile ground to the south of Haibat-grām and stretching away to the river northward having supported in ancient times a far larger population than at present.

Beyond the village of Jalāla the precipitous foot of the Landakai spur was approached. The latter is washed at its northern extremity by the river and must at all periods have formed a strong defensive position, especially during spring and summer when the bank of the river is rendered impassable by the floods. The Landakai spur was thus held in 1895 when the tribes of Upper Swāt defended the passage against the punitive expedition detached from the Chitrāl Relief Force. Most of the ruined Sangars and roughly built towers sighted on the top of the spur probably date from this or similar occasions. Now the ruler's newly built motor road crosses the Landakai spur in bold serpentines high above the river.

Help of Rāja Shāh ʿĀlam.—Having entered here the Swāt ruler's dominion I passed on to the large village of Kōtāh and at his newly built fort beyond this was received by Rāja Shāh ʿĀlam, the nephew of the late Rāja Pakhtūn Wālī, of Tangīr and Darēl, and an old friend. I have related before how helpful that young scion of the Khushwakt race had been to me in 1913 when as the first European I visited the hill territories above the great bend of the Indus which the enterprise of his uncle had turned into a new chiefship of his own.[2] After the murder of Rāja Pakhtūn Wālī and the sudden collapse of his 'kingdom' Shāh ʿĀlam had been obliged first to seek refuge in Kandia with the rest of the family. He was subsequently received by the Miāngul under whose protection he now lives as an honoured exile.

I had every reason to feel grateful for the kindly consideration and forethought which caused the Ruler of Swāt to attach Rāja Shāh ʿĀlam to my person for the whole of my tour in his territories; for just as in Darēl and Tangīr this well-educated and very intelligent former companion proved once more of the greatest help for all my investigations. For the very valuable services which Rāja Shāh ʿĀlam rendered to me in connexion with my work and for the many proofs of his devoted personal attachment I received during these months I wish to record here my sincere gratitude.[3] At Kōtāh I was joined also by Abdul Latīf Khān, the son of the chief Khān of Bīr-kōṭ. He was the first youth of Upper Swāt who received a modern education at the Islamia College, Peshawar, and he had been accepted as a candidate for administrative employment in the N. W. Frontier Province. At Mr. Metcalfe's suggestion he was anxious to accompany me on my tour. Acting as a kind of liaison assistant he spared no trouble to make himself useful to me with regard to my work. For the help rendered by him through local enquiries and otherwise my grateful acknowledgment is due.

Ancient dwellings above Kōtāh.—Heavy rain overnight and all through the morning of March 13th did not allow me to proceed as early as I should have liked for the examination of the clusters of ruined dwellings on the hill

[2] See *Innermost Asia*, i. pp. 15 sqq.
[3] Cf. also *On Alexander's Track*, pp. 22 sqq.

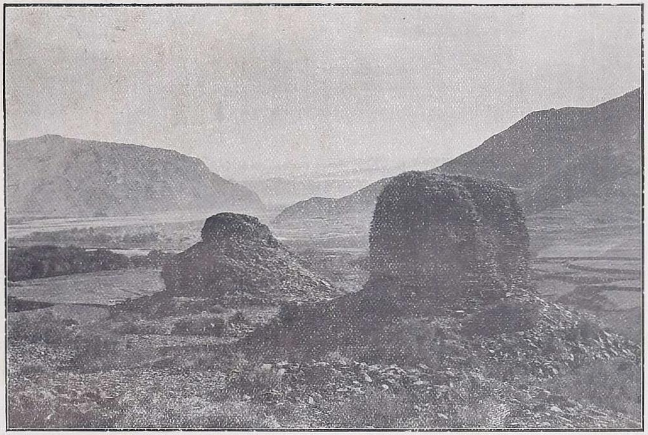

FIG. 2. RUINS OF STŪPAS, SOUTH-WEST OF BĪR-KŌT.

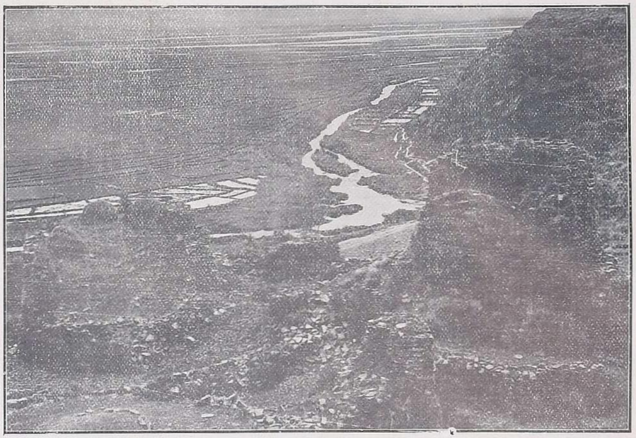

FIG. 3. RUINED STŪPA AND SANCTUARY, GUMBATŪNA.

FIG. 4. RUINS OF BUDDHIST SITE, NAL.

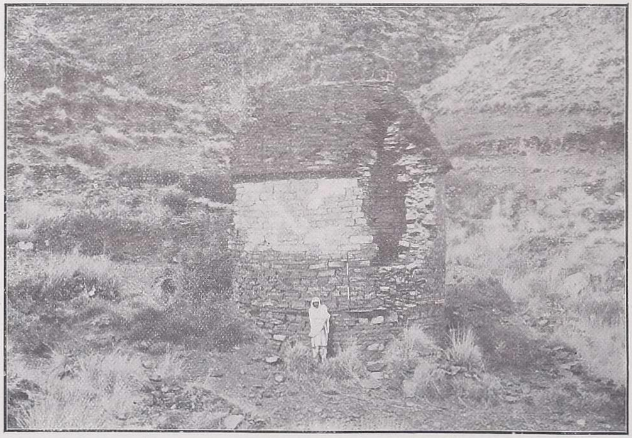

FIG. 5. SMALL VIHĀRA AT GUMBATŪNA.

spurs to the south-west of Kōtāh; I had sighted them already two days before from the height of Dosillo-sar. The northernmost of them was reached at a distance of about a mile from the main village of Kōtāh. This group and the next situated less than a mile to the south-west, are known as *Skhā-chīna* from a spring above the latter. In each of them as well as in the groups further south there are found half a dozen or more of isolated dwellings, all placed, as the photograph Fig. 12 shows, along the crest lines of rocky ridges.

The characteristic structural features are more or less the same in all of them. There is almost invariably found a keep-like main apartment or tower, built solid up to a height of 10 or 12 feet and in consequence better preserved than the rest (Fig. 13). It is usually adjoined by other rooms, of varying sizes, often ranged, as the rough sketch plan in Pl. 1 of one typical dwelling shows, round a kind of small central court. The walls are usually about 3 feet thick and invariably show masonry of the Gandhāra type with stone slabs either roughly dressed or altogether unhewn. Owing to the absence of mortar or other hard plaster the walls are often decayed almost to their foundations, or else so heavily encumbered with debris that the position of the entrances to the different rooms cannot always be distinguished. In some cases, however, the holes spared for the heavy wooden cross-bars with which the doors were closed from the inside, could still be distinguished.

That defence was an essential consideration in all these dwellings is proved by the loop-holes in the walls of small outside courts which were found adjoining some of the larger ruins in a third group known as *Randukai*, half a mile to the south. The loop-holes vary in height from 26 to 18 inches, and are splayed out from a width of 4½ inches outside to 14 inches inside. The apertures in those walls of dwelling rooms which face outside were treated in the same secure fashion, though obviously primarily intended to give light and air. Another detail shown by the rapid examination of several dwellings was the presence of small stone-faced pits in the ground varying in their dimensions from 4 feet square to 10′ 10″ in length and 2′ 7″ in width. There can be no doubt that these recesses, like the present *kandus* dug into the ground near Pathān dwellings, served for the storage of grain.

Defensible character of structures.—There are ample indications that these defensible structures, some of them well deserving the designation of *mānrai*, 'mansion', indiscriminately given to them by the people, were here and elsewhere intended to provide safety for their occupants when danger threatened, whether from outside or from local enemies. They are to be found plentifully throughout the lower portion of Swāt and in the valleys which descend from the watershed range towards Bunēr and the Peshawar valley.[4] They are almost invariably built on rocky spurs or slopes difficult of access and far away from cultivable level ground. It also deserves to be noted that evident care was everywhere taken to place them as such distances from each other as to prevent their being directly commanded by their neighbours. The construction of such massive dwelling places, especially when built in the

[4] Cf. my *Tour with the Buner Field Force*, pp. 5 sqq.; *Archaeol. Report, N. W. Frontier Province*, 1912-13, pp.

positions they ordinarily occupy, must have involved a very heavy outlay of labour. It is evident, therefore, that such dwellings could have been built only by local headmen and other people of substance.

It seems scarcely possible to avoid the conclusion that conditions of insecurity must have been frequent during Buddhist times, notwithstanding all the pious devotion which, as attested alike by the records of the Chinese pilgrims and the abundance of ruined Buddhist sanctuaries, must have prevailed throughout Swāt at that period. Yet it would not be justified to suppose that the presence of such defensible dwellings is evidence of a particularly bellicose character in the ancient population of this region, as it certainly is at the present day as regards certain parts of the North-western Frontier. What I had observed on the westernmost marches of China proper was enough to warn me against such an inference. There, in Kansu, I had seen not only every town and village, but every single outlying hamlet or farm defended by high and thick walls of stamped clay. But those who had tried to protect themselves by these defences of impressive appearance against the devastations of the last great Muhammadan rebellion—and against those which its recurrence might threaten, were all peaceable Chinese folk.

What deserves to be specially noted in this connexion is the striking scarcity of broken pottery among all these ruined mansions of Swāt. Can its absence be considered a sign that these structures had served only the purpose of places of occasional refuge when danger threatened, while their owners in ordinary times preferred to dwell lower down nearer to water and their lands ? It appears anyhow probable that the bulk of the cultivating population must have lived in far humbler but more conveniently situated quarters.

Buddhist ruins of Gumbatūna.—After more heavy rain during the evening and night the weather cleared sufficiently to permit of a move up the main valley. While our camp was sent on to Bīr-kōṭ I proceeded from the village of Gurutai to cross the wide belt of flooded rice fields between which the Swāt river flows in several interlacing beds, in order to visit the ruins reported at the small hamlet of Gumbatūna. As the name, the 'domes', had led me to expect, I found there a group of ruined Buddhist Stūpas nestling in a picturesque nook of the hillside which rises on the river's left bank close above the northernmost of its branches. On an artificially widened small plateau, some 80 feet above the alluvial flat, there rises a large but much injured Stūpa (Fig. 3). By its side stands a massive square base badly broken which may have carried a Vihāra, while the remains of two small Stūpas could be traced to the north and south-east of the large one. The main Stūpa of which Pl. 2 shows a sketch plan and section has the usual three bases, the lowest measuring 52 feet square, and a dome 34 feet in diameter. The total height when intact must have exceeded 45 feet. This Stūpa, like also, the rest of the structures had been burrowed into, probably more than once. It had been cut all through from the east and a shaft 8 feet wide sunk down the centre from the top. In spite of the ravages of time and the hand of man, layers of hard cement-like plaster still survived in places on the surface of the dome and drum.

An ancient walled-up terrace, now occupied by the mosque and some of the hovels of the hamlet, rises about fifty feet above the Stūpa plateau. Of the monastic quarters which are likely to have stood here, nothing could be traced on the surface. But in a small ravine to the north-east at a distance of some 150 yards from the mosque there is found a small circular shrine in comparatively fair preservation (Fig. 5). The little rotunda has an interior diameter of 14′ 9″ and still carries a rather flat dome partly intact. Its walls, 3 feet thick, rise 16 feet above the surface of the debris-filled interior. This may well hide remains of stucco images of Buddhist divinities such as are likely once to have stood in this little Vihāra. On the south the wall descends about 8 feet more, suggesting a total height of over 24 feet for the structure; the entrance to it faced north. A small rocky ridge to the north bears the remains of a circular Stūpa base about 12½ feet in diameter, standing to a height of 4 feet or so above the ground. Below it and at about 100 yards above the rotunda there issues a fine spring in the picturesque gully. This and the beautiful view right across the wide valley, with the sacred height of Mount Ilam rising far away in the distance, may have helped to bring about the selection of this spot as one of the many which pious tradition considered to be sanctified by the Buddha's visit to ancient Uḍḍiyāna.

Re-crossing the river by raft we reached the foot of the long-stretched hill of Bīr-kōṭ near its western end where it falls off with sheer cliffs to a deep channel of the river. Thence scrambling along the steep rocky slopes by a difficult footpath which passes a saint's supposed resting place, we made our way to the large village of Bīr-kōṭ. There our camp had been pitched under the shelter of the ruler's newly built fort and 'Taḥsīl', and there I found myself awaited by his Sipāh-sālār or commander-in-chief, Aḥmad 'Alī Khān. With his personal bodyguard of well-equipped men-at-arms he was thereafter to look after me throughout my tour. Wherever it took me, I found in this active and capable warrior a most pleasant and helpful protector.

SECTION II.—BUDDHIST RUINS AROUND BĪR-KŌṬ

The village of Bīr-kōṭ which was to serve as the base for my explorations of the next four days, is a large and flourishing place. It occupies a position on the main route through Swāt which natural advantages were bound to invest with importance at all times. It is delightfully situated at the eastern foot of the Bīr-kōṭ hill (*Bīr-kōṭ-ghuṇḍai*), already referred to. This gives its name to the village and provides for its inhabitants a place of safety of great natural strength. On the other side of the village there descends from the east the last outlier of a large well-wooded spur branching off from Mount Ilam. Through the gap left between it and the foot of the Bīr-kōṭ hill there debouches towards the river a lively stream which unites the waters gathered in three large and fertile valleys. All three descend from that portion of the watershed range which divides Swāt from the western portion of Bunēr and

is crowned by Mount Ilam. Routes lead up these valleys to passes all of which give easy access to Bunēr. One of them, the Karākar pass, is much frequented as lying on the most direct line between Upper Swāt and the central part of the Yusūfzai plain. The upper slopes in these valleys are well wooded with cedars, firs and pines, while lower down there is plenty of arable ground both along the streams and on terraced fields.

Advantages of Bīr-kōṭ position.—Everything in the way of topography and economic resources combines to favour this tract of which Bīr-kōṭ is the natural centre. Hence it cannot surprise that the rural wealth with which it must have been endowed in ancient times as well as its other attractions are duly reflected by the abundance of Stūpas and other sacred remains which the pious ardour of the ancient Buddhist dwellers has left behind here. It will be convenient for the purpose of this report first to describe the numerous and important Buddhist sites which I was able to trace and survey in these valleys, before I proceed to give an account of the ancient stronghold discovered on the Bīr-kōṭ hill and to discuss the special historical interest attaching to it.

Ruined Stūpas in Kandag valley.—Following the general direction of my journey we may first visit the westernmost of those valleys, known as *Kandag* from one of its principal villages. Where it opens out towards the hill of Bīr-kōṭ there rises a pair of large but much injured Stūpas (Fig. 2) at the foot of a small ridge. This is the last offshoot of the spur which divides the Kandag valley from that of Najigrām, the next eastwards. The Stūpas are situated at a distance of three quarters of a mile from Bīr-kōṭ village. They stand within about 57 yards of each other and as the sketch plans, Pl. 2, show, have structurally much in common. Both have suffered far too much from quarrying operations for building stones and successive diggings for 'treasure' to permit all dimensions to be determined with any approach to accuracy. But in the case of both it was possible to make out that in addition to the two usual circular upper bases and a lower square one there was a large terrace below, close on 70 feet square, supporting each Stūpa. The southern one still retained in places the stone facing of the dome; this made it possible to ascertain its diameter as measuring approximately 26 feet. Its height including the drum could not have been less than 24 feet. The northern Stūpa which had been damaged even more appears to have carried a dome only about 20 feet in diameter, while its proper square base showed the unusually great height of 16 feet. Along its foot there were indications of recent diggings for sculpture. These were ascribed to the same men who had been employed in rifling the ruined shrine close to Nal village. Among the débris at the foot of the Stūpa lay a massive stone slab, 3 feet 4 inches square and 6 inches thick. As shown by a hole in the centre, it had evidently once been fixed between the top of the dome and the succession of 'Chhattras' surmounting it.

Ruined shrine of Gumbat.—Better preserved and more interesting architecturally was the ruined structure appropriately known as *Gumbat*. It was visible from a considerable distance and was reached after a steep ascent over

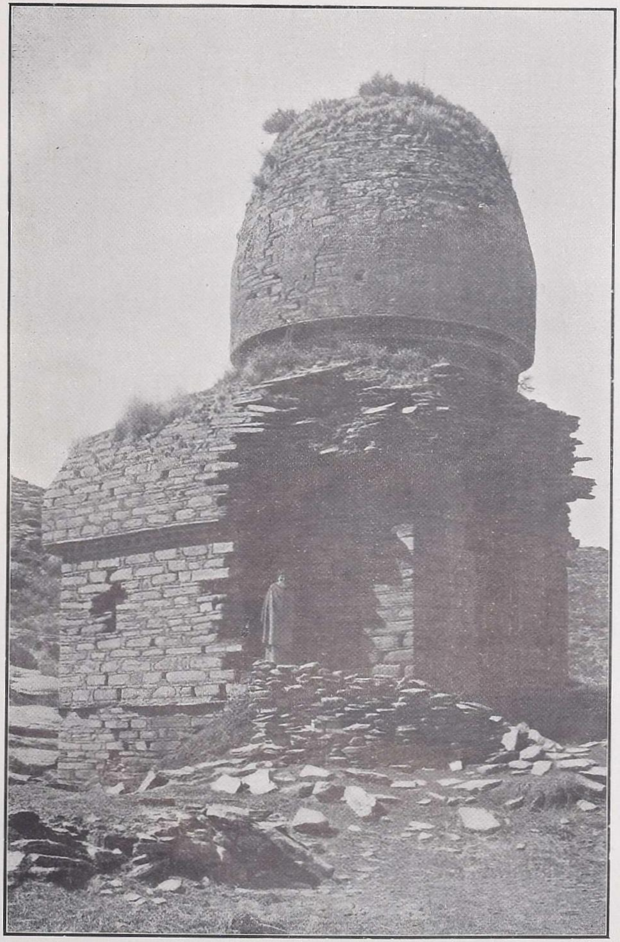

Fig. 6. Entrance and passage of Buddhist Vihāra, Bālo, Kandag Valley.

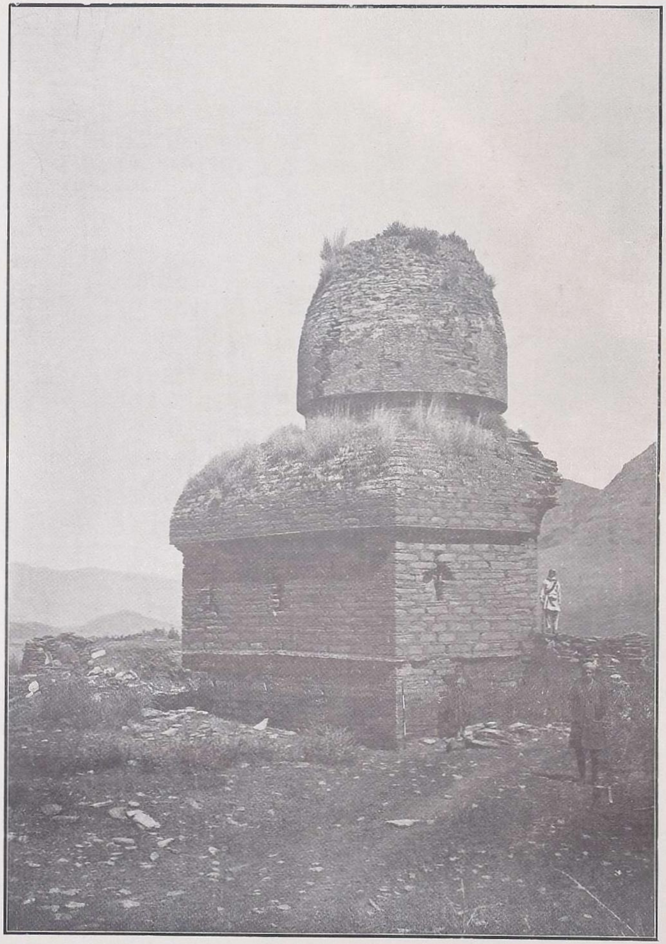

Fig. 7. Ruined Buddhist Vihāra, Bālo, Kandag Valley, seen from south-west.

rocky slopes above the Gujar hamlet of Balō-kile. This lies up the western side of the valley and about four miles from Bīr-kōṭ. The domed structure proved of unusual shape, comprising a high cella surrounded by a narrow vaulted passage which obviously was intended for the performance of *pradakṣiṇā.* As seen in Fig. 6 the side facing east and containing the entrance had completely broken down. But the walls of the cella had remained practically intact and so also the outer walls of the passage on the west and over most of the other two sides (Fig. 7). This comparatively good preservation of the shrine was obviously due to the solidity of the masonry. This consists mainly of large slabs, up to 4 feet in length and about 6 inches thick, the whole carefully set in Gandhāra fashion.

As seen in the sketch plan and section, Pl. 4, the rectangular cella measures 11 feet 3 inches by 12 feet within walls 3 feet thick. They are pierced on three sides by narrow windows which correspond to slightly wider ones admitting light to the passage. The passage is 3 feet 3 inches wide and its vaulted roof springs at a height of approximately 17 feet above the ground. But the exact level of the original flooring could not be determined as the interior both of passage and cella is filled to a considerable height with refuse accumulations. I found the cella occupied by a Gujar family while part of the passage was used to shelter their buffaloes. A heavy curving roof springs from a boldly projecting cornice and covers the passage. Above this there rises the high bulb-shaped dome having a diameter corresponding to the width of the cella. It was not possible to ascend to the top of the dome and to determine its exact height. But judging from such measurements as could be taken on the exterior of the structure its total height above the probable level of the original ground could not be less than 43 feet. A hole was broken through the top of the dome. The great elevation of the latter suggests that the cella might have once contained the colossal standing figure of a Buddha or Bodhisattva, likely to have been modelled in stucco. But only a complete clearing could throw light on the true character of the shrine.

A terrace to the south of the structure bears the remains of massive walls and what seem to have been the foundations of small Stūpas. These all had been recently dug into by men searching for sculptures on behalf of the same employer as at the ruined shrine of Nal village. Small broken pieces of relievos could be picked up in numbers from rough enclosures erected around by Gujars. Among these fragments, all showing rough workmanship and much injured, it was possible to recognize a small seated Buddha; a little putto-like figure rising half above the ground, and a diaper of four-petalled flowers, common in Graeco-Buddhist sculpture.

A completely dug up mound near the north-eastern corner of the shrine probably marks the position of a Stūpa of moderate size. On the steep slope below the western side of the ruin there lay a circular stone slab, 6½ feet in diameter, which obviously had served as a *chhattra.* It was difficult to ascertain over which structure this large stone may have originally been placed. The dome over the cella could scarcely have supported a series of such heavy

stone umbrellas. It remains to be noted that close to the SSW. of the ruined 'Gumbat' there is found a small spring which probably accounts for the position of this Buddhist sanctuary.

Ruined monastery of Kanjar-kōṭē.—On returning from this ruin late in the day I visited the site known as *Kanjar-kōṭē* lower down in the valley. There at a distance of about two and a half miles to the south-west of Bīr-kōṭ village and on the eastern side of the rocky ridge below which lies the village of Abūwa, there extends a complex of badly decayed ruins on terraces, walled up in parts. The lowest of them lies about 150 feet above the fields of Mal-kidam; above them rise boldly eroded cliffs of red sandstone looking like frowning walls. The contrast offered by this wild solitude, a small Thebais, to the smiling green fields below was strangely impressive in the light of the evening.

The lower and main series of the terraces stretches, as seen in the rough sketch plan, Pl. 1, for about 110 yards from NW. to SE. and is occupied by what obviously are the remains of a large Buddhist establishment. On the terrace A first reached from below it was just possible to trace indications of what evidently was a court once containing small Stūpas. It was surrounded in parts by chapel-like niches holding images, much after the fashion of the large chapel court found among the ruins of Takht-i-Bāhī. Of two of these 'chapels' the walls, 10 feet high and flanking recesses 5 feet wide, are still more or less intact. Near them a low circular mound, about 21 feet in diameter, probably marks the base of a completely wrecked Stūpa. The position of another still smaller Stūpa could be made out in the western corner of this terrace. This terrace and the one adjoining westwards on a somewhat higher level are everywhere covered with heaps of stone debris, marking the position of destroyed structures. Several were probably of large size and may have contained monastic halls and dwellings. They are aligned on what seems to have been a road traversing the whole area.

Leaving this complex by what looks like an entrance through an enclosing wall to the north-west, and ascending the steep rocky slope, a group of massive ruins is reached about 80 feet higher up. Here several vaulted rooms can be distinguished built against the sheer cliffs rising a hundred feet or more above them. Their position which is difficult of access, and the masses of detritus which fill them for the most part appear to have saved these ruins from being dug into and quarried like the rest for 'treasure' and building material. A narrow glen descending below them to the south looks as if it might once have held water.

Valley of Najigrām.—The valley stretching almost due south of Bīr-kōṭ and conveniently designated after the village of Najigrām, revealed a large and interesting Buddhist site besides several ruined Stūpas. On moving into this valley from where it is joined by the one which descends from the Karākar pass, I noticed that near the large village of Natmīra situated about $1\frac{1}{2}$ miles from Bīr-kōṭ there are several high and very massive walls of distinctly ancient look supporting cultivation terraces. One of them shows a large pointed recess or niche probably not less than 30 feet high which may well have served

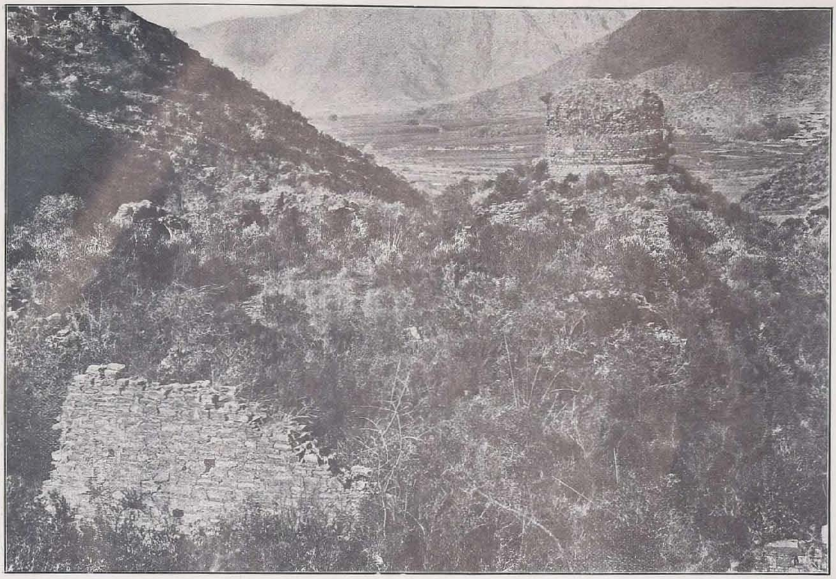

Fig. 8. Ruins of Stūpa and monastery, Tōkar-dara, seen from south.

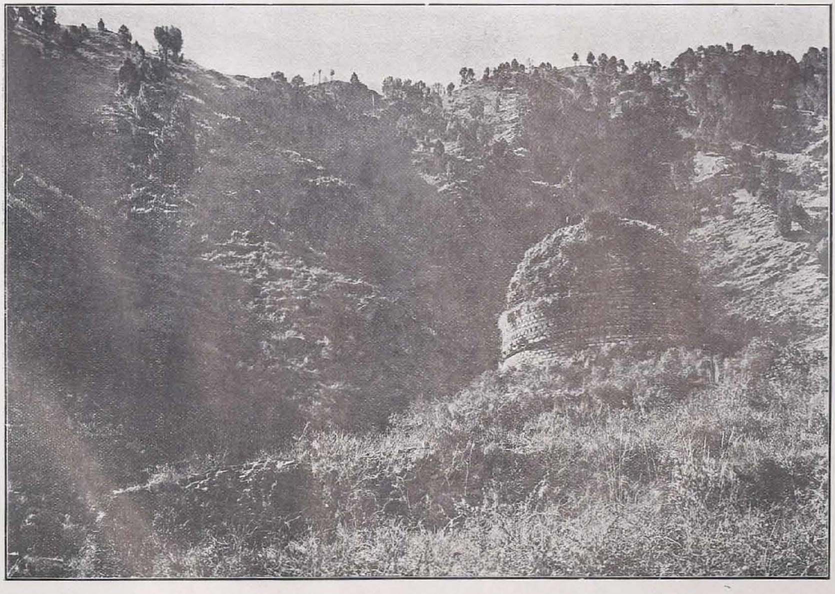

Fig. 9. View up Tōkar-dara glen, with ruined Stūpa.

to shelter a colossal Buddha image. Time did not permit of closer examination of this spot nor of the numerous ruins of ancient dwellings resembling those noticed near Kōtāh, which are visible on the extremity of the spur dividing the Najigrām and Karākar valleys.

Stūpa of Tōkar-dara.—From the village of Najigrām, which nestles at the western foot of this spur and was reached after about three miles' march from Bīr-kōṭ, there came into view westwards the conspicuous ruined Stūpa known as *Tōkar-gumbat.* It lies about half a mile from the village at the entrance of a small picturesque glen known as *Tōkar-dara* (Fig. 9), wooded on its higher slopes and filled with thick thorny jungle below. The site proved far more extensive and interesting than expected at first sight, a series of structures up the glen being hidden behind the large ruined Stūpa. This rises close to the left bank of the torrent bed and, though dug into both from the north and south-east, has suffered less destruction than the Stūpas nearer to Bīr-kōṭ. As shown by the sketch-plan, Pl. 3, its dome is raised on three bases of which the lowest measures 66 by 68 feet. The second is square and carries the third which is circular as in all Swāt Stūpas.

The drum of the dome which rises above this measures 35 feet in diameter. It is decorated with two cornices formed as usual by thin vertical slabs of stone projecting at intervals between horizontal courses. The dome proper appeared to be of hemispherical shape. It had suffered too much damage for the height to be exactly determined. On its broken top the inner face of walls lining a shaft, 4 feet square, and descending towards the centre could be distinguished. Through it treasure-seekers had burrowed downwards.

Ruins of monastic quarters.—The whole of the drum and dome had been faced with roughly dressed white slabs and the interstices between them filled in Gandhāra fashion with columns of small pieces of dark stone. The same material was used for the packing which divides the courses. A flight of stairs 8 feet wide led up to the second base from the east. Rank vegetation covered the whole of the Stūpa bases and rendered exact measurement difficult.

Above the Stūpa and at a distance of 13 yards from the southern side of its lowest base there rises a large walled up terrace bearing the massive remains of a monastic quadrangle (Fig. 8) thickly overgrown by scrub. Its enclosing walls appear to have measured 90 yards square on the outside. Within them six domed chambers, 11 feet square, occupied each side. Near the south-western corner of the quadrangle there are found broken walls of a high rectangular structure which might have served as a meeting hall for the Saṅgha. To the east of this it was possible to trace a rectangular walled enclosure, measuring about 100 by 90 feet. Within it rises a square terrace, about 16 feet high, too much broken to show its exact disposition except that a broad flight of stairs led up to it on the north side. On the top a base, 30 feet square, is exposed to a height of about 2 feet; but no remains of a Stūpa or other solid superstructure could be traced. On the north face of the terrace I found a little relievo panel embedded in the masonry, showing a standing

Buddha with a smaller Vajra-carrying figure by his side. The position of the relievo suggested that in the course of repairs use had been here of materials from some older shrine.

Some 150 yards higher up the glen a conical mound marks the position of a completely decayed small Stūpa. Higher up still on the wooded slopes to the west remains of ruined dwellings could be seen built against the rock. On the eastern side of the glen, about 150 feet above the monastic quadrangle, there is seen a cave, apparently natural, with its high entrance blocked to about half its height by a wall which looked ancient.

Remains of ancient barrage.—Water was said to be found now only at a spring high above the site. Its distance may help to account for the very interesting remains of an ancient barrage found in the torrent bed a short distance below the Stūpa, as seen in Figs. 10, 11. A long double wall stretching along the eastern bank of the deep-cut dry Nullah first attracted my attention to it. This double wall is preserved for a length of close on 120 feet and leads, as the sketch plan, Pl. 3, shows, to the barrage proper which stretches across the Nullah for a distance of upwards of 160 feet. In the middle where it crosses the torrent bed itself it has been completely broken for a distance of about 30 feet. On the east the masonry of the surviving portion of the dam rises about 28 feet above the bottom of the boulder-filled bed. The wall intended to hold up the water has a thickness of fully 10 feet, not too much considering the pressure it was meant to withstand. Separated from it by a passage, 4 feet 3 inches wide, to the purpose of which I shall presently refer, there is found an outer wall 6 feet thick. To the west the barrage proper has its continuation in a row of small vaulted chambers. Four of these, measuring each 8 feet 6 inches square and retaining their dome-shaped roofs constructed with horizontal courses, are still accessible through vaulted doorways. The fifth, nearest to the dam, is completely blocked by debris and its construction uncertain. The height of the vaulted chambers is about 15 feet to the centre of the domes. These rest in the corners of the rooms on large slabs cut into semilunar shape and taking the place of squinches.

Particular interest attaches to the passage, originally vaulted throughout, found between the double walls of the barrage proper and to those which meet it at right angles on the east. They were obviously intended to regulate the outflow from the reservoir formed above the dam and to provide for drainage at the time of floods in the glen. The space between the two walls on the east is divided by an intermediate wall, 3 feet thick, into two separate passages, each 2 feet 6 inches wide. Their bottoms were laid at different levels, but only that of the outer passage could be definitely ascertained, as shown by the section in Pl. 3. Its stepped flooring clearly marks it as intended for draining. The height to the top of the vaulted roof is 9 feet. The western passage appears to have had its floor laid on a level about 3 feet higher; but this could not be definitely ascertained owing to the accumulation of debris and the damage which the retaining wall towards the Nullah had suffered. Where the dam proper is approached the two passages unite

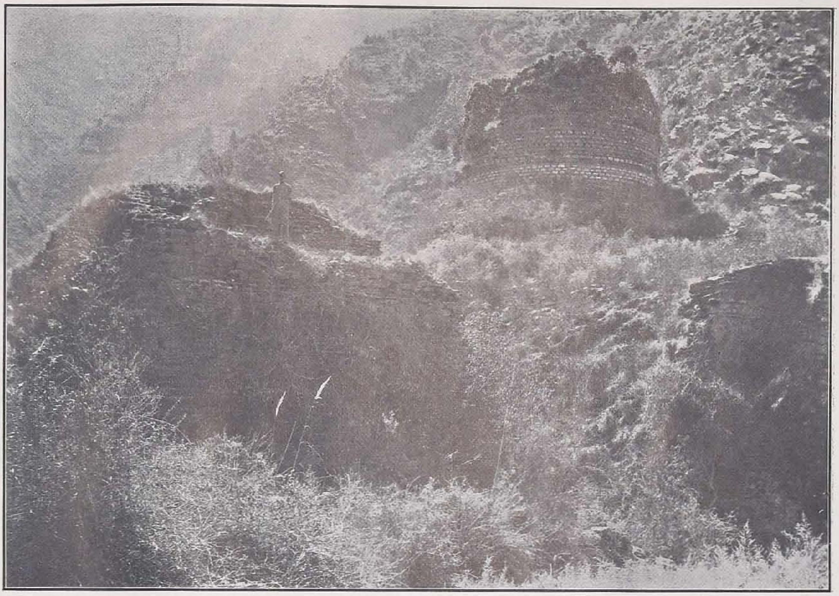

Fig. 10. Walls of barrage below Stūpa, Tōkar-dara.

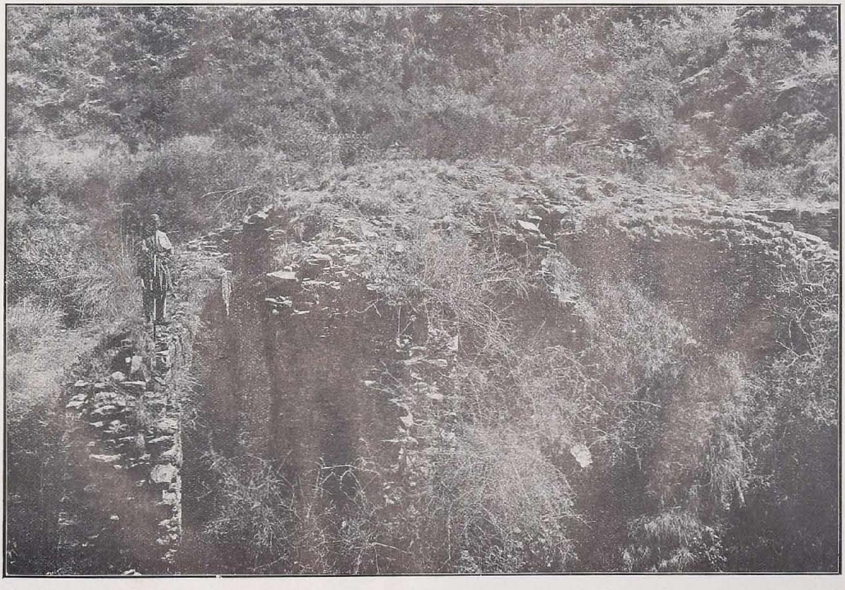

Fig. 11. Broken walls in centre of barrage, Tōkar-dara.

in one 6 feet wide. This has its floor on the same level as the outer passage to the east and still retains its vaulting. Fig. 11 shows the present opening of the passage at the break in the middle of the dam. The arrangement by which an exit through this was provided for the water could no longer be ascertained, nor by what means the drainage from the reservoir into the two passages on the east could be controlled.

Antiquarian interest of barrage.—But even without any indication as to the position of sluices or the like which may have been used for this purpose, the remains of this ancient barrage are of distinct antiquarian interest. They are the only ones known to me that have survived from Buddhist times on the N. W. Frontier or in the neighbouring region. There can be little doubt that an engineering work involving so much constructive care and labour would not have been undertaken merely for the purpose of bringing water for domestic use and ablutions conveniently near for the monks living at the sanctuary and for visitors. It appears to me highly probable that the rain water stored in the reservoir was meant also for irrigating the terraced fields below.

On a terrace close below the barrage are found the remains of a badly decayed Stūpa marked by a mound about 10 feet high. It had been evidently the scene of recent 'irresponsible digging', as shown by small broken pieces of relievo panels which could be picked up among the debris around the mound. That the site of Tōkar-gumbat would offer a good field for systematic excavations is evident, and it must be wished that until they can be undertaken the goodwill of the enlightened ruler may put a stop to further destructive operations of those who have exploited the Buddhist sites of Swāt for the benefit of amateur collectors and more recently of antique sellers.

Returning towards Najigrām I visited two much decayed mounds found in the main valley about half a mile above the village and obviously marking completely destroyed Stūpas. Then following the lively stream the small Stūpa ruin, known as *Jrandu-gumbat* from a water-mill close by, was reached about 1½ miles further up. It too had suffered much from digging and quarrying. But the presence of two circular bases above a square one could still be made out and the diameter of the partly surviving drum determined as measuring about 18 feet. The neat plaster moulding of two cornices decorating the drum was still preserved in places.

Remains of Karākar valley.—The third and easternmost of the valleys which descend towards the river at Bīr-kōṭ is that coming from the Karākar pass. On moving up the good mule-path which had been constructed to the pass under the ruler's orders, we first passed after a mile from Bīr-kōṭ an ancient well, 9 feet in diameter and lined with Gandhāra masonry. It had been recently cleared to a depth of 15 feet without yielding water. Where the valley bends round the foot of an outlier of the spur dividing the Najigrām and Karākar valleys, about 2½ miles from Bīr-kōṭ, there rises on a large walled up terrace the Stūpa known by the name of *Kōtanai*. Though completely stripped of its masonry facing and otherwise badly injured, it is a conspicuous

object in the valley. Half a mile beyond is passed the village of Nāwagai clustering round a fine spring which is brought from the hillside above in a walled conduit undoubtedly ancient. Here some copper coins of Indo-Scythian and Kushān kings were brought to me as having been found at Kōtanai and near the Stūpa of Amlūk-dara. But more probably they had been picked up locally among the ruined dwellings which, as already noted before, could be seen dotting the steep hill-sides above on the spur towards the Najigrām valley.

About a mile above Nāwagai we left the road to the Karākar pass and turned south-eastwards into the fertile and picturesque side valley of Amlūk-dara. This descends straight from the steep heights of Mount Ilam still carrying heavy snow at the time. As we moved towards the village bearing the same name, between flower-decked hedges and trees in bloom, I was shown on a small verdant meadow a large boulder bearing the rudely carved relievo representation of a seated Buddha. It measures 4 feet 8 inches in height. The pious zeal of Pathāns had done what it could without too much trouble to deface the sacred image, especially the head.

Stūpa of Amlūk-dara.—On leaving the village which contains about forty homesteads, mainly of Gujars, an imposing Stūpa came into view. It occupies a conspicuous position on high ground close to where the valley bifurcates, one branch running up straight up to Mount Ilam and the other to the saddle of Sarbāb on its northern spur. When reached a mile beyond the village and after a total march of about 6½ miles from Bīr-kōṭ, it proved in better preservation than any ancient Stūpa I had ever seen and constructed with remarkably careful masonry (Fig. 16, 18). Its secluded position far from any large place or much-frequented route had helped to save it. As the sketch plan and section, Pl. 3, show, the Stūpa is raised on a magnificent base 113 feet square and not less than 28 feet high. Above this are placed two circular bases, the lower one together with its plinth being 9 feet high. The drum on which the hemispherical dome rests has a diameter of 71 feet, thus making the Stūpa proper the largest of all I surveyed in Swāt. The drum is divided by a bold cornice supported by brackets at intervals of one foot. A second cornice projecting farther runs below the bottom course of the dome. The latter measures about 46 feet over its curve. Taking into account the conjecturally estimated elevation of the dome the height of the whole structure cannot fall much short of a hundred feet.

An imposing flight of stairs which appears to have been over 40 feet wide led up on the north side of the square base. From it the top of the first circular base was approached by stairs 12 feet wide. It is only here that the stone facing of the dome and drum is broken for a width of about 15 feet. But the attempt which had evidently been made here to reach the centre and the relic deposit surmised there had not been persevered in, and the relic chamber of the Stūpa may be assumed to be still intact. As shown by Fig. 18, the masonry facing of the drum and dome consists of large roughly dressed slabs carefully laid in regular courses. The columns of small dark stones placed

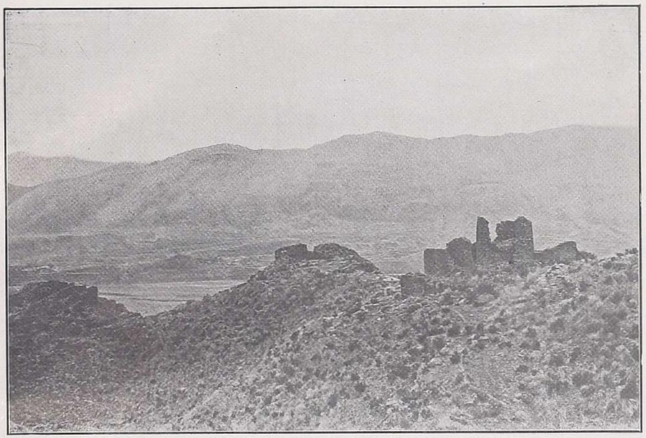

Fig. 12. Ruined mansions on ridge above Kōtāh.

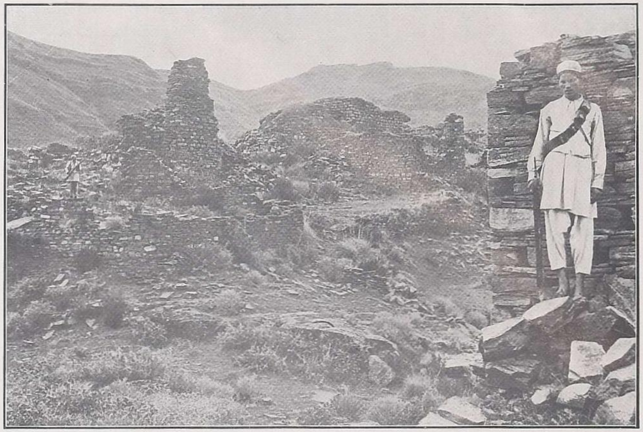

Fig. 13. Ruined dwellings and tower on Bandakai ridge above Kōtāh.

Fig. 14. Ruins of monastic court and Vihāra at Tōkar-dara, above Stūpa.

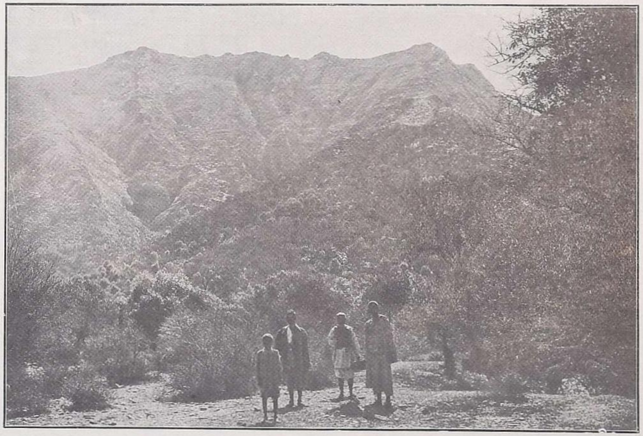

Fig. 15. View up slopes of ancient stronghold above Uḍegrām.

laterally between the slabs and the thin layers of similar material dividing the courses exhibit the Gandhāra type of masonry in unusually neat execution. The whole structure must have once borne a solid coating of plaster; for remains of very hard white stucco still cling in places to dome and bases.

A curious feature not observed elsewhere is the presence in the upper cornice of large stone slabs showing semi-circular hollows on their projecting edges. The square base and perhaps also the lower circular base were adorned with flat pilasters projecting about 8 inches. But the columns of small flat stones of which they were composed have crumbled away in most places, leaving only matrices as it were in the wall surface to mark their position. On the eastern side of the square base there lie in a heap four stone 'umbrellas', once raised above the dome, just as they had fallen. Fig. 18 shows them on the right. The largest of them measures 14 feet, the smallest 5 feet 3 inches in diameter. A rectangular slab, 12 feet long, which lies half-buried between them, probably belonged to the member resembling an inverted base which miniature Stūpas from Gandhāra sites usually show between the top of the dome and the succession of Chhattras.

Remains near large Stūpa.—About 50 yards to the east of the great Stūpa a decayed mound marks the position of a small one. Further up, at a distance of circ. 150 yards, four more little mounds are counted within an area about 80 yards square. They, too, probably are the remains of Stūpas. None of these appeared to have been dug into. A much broken mass of masonry is found also near the south-western corner of the large Stūpa base, while on rising ground westwards are scattered ruined walls likely to have belonged to monastic quarters. Of two copper coins brought to me and declared to have been found at the site one was a Kushān issue much effaced and the other a piece of the Turkish Shāhīs of Kābul. They respectively indicate the approximate periods when worship at the site may have most flourished and when it ceased. Definite chronological indications could be hoped for only from such a systematic exploration as the site owing to its obvious importance and its undisturbed condition invites.

It deserves to be noted that the valley of Amlūk-dara lies on the route followed by the Hindus of lower Swāt on their annual visit to the sacred height of Mount Ilam which forms so striking a background to the ruined Stūpa. The top of the mountain was an object of pious pilgrimage already in Buddhist times, as shown by Hsüan-tsang's description of Mount *Hi-lo* the identity of which with Ilam I was subsequently able to establish. The site of Amlūk-dara is among all Buddhist sanctuaries I was able to trace certainly the nearest to the sacred peak and may well have been connected in some way with the pious legends which once clustered around it and in a modified form have lingered to the present day.

SECTION III.—THE HILL OF BĪR-KŌṬ

The brief account given above of the topographical advantages enjoyed by the position of Bīr-kōṭ and the description of the numerous and large Buddhist

sites I was able to survey in the valleys converging upon it, would by themselves be sufficient to prove that Bīr-kōṭ must have been a place of considerable importance already in ancient times. But direct and conclusive archæological evidence of this fact is furnished by the large ruined stronghold to be found on the conspicuous hill of *Bīr-kōṭ-ghuṇḍai*. This rises above the left bank of the Swāt river close to the west of the village and has given its name meaning the 'Bīr Castle', to the village below. This name *Bīr-kōṭ* is the one regularly used by the local people, the 'Bari-kōt' of the map being the form preferred for some reason in the Persian correspondence of scribes and Mullahs.

Natural strength of Bīr-kōṭ hill.—The natural strength of the hill, completely isolated and rising to close on six hundred feet above the riverine flat, is so great and the ruins on its top and slopes so extensive as to make it one of the most noteworthy sites in the whole of Swāt. But an additional and to the Western student much greater interest attaches to this ancient stronghold. It is here that I was first able to identify one of the places figuring in the Frontier campaign which preceded Alexander's invasion of the Panjāb and which we know must have taken him into Swāt. But before we examine the records of Alexander's historians supporting this location, it is necessary to detail the results of the examination I was able to make of the Bīr-kōṭ hill and its remains. Reference to the map in Pl. 5 prepared by Surveyor Tōra-bāz Khān will help to illustrate them.

Where the broad spur flanking the Kandag valley on the west approaches the left bank of the river it curves round to the north-east. After descending to a low and broad saddle which the main road up the Swāt Valley crosses near the village of Gurutai, it rises again, marked along its crest by a succession of bare rocky 'kopjes', and ends abruptly in the rugged isolated hill of Bīr-kōṭ. This hill is washed at its northern foot by the river and culminates in a bold rock pinnacle, attaining a triangulated height of 3,095 feet. The hill is roughly crescent-shaped and drops on its convex sides towards the river with precipitous rocky slopes, very difficult to climb and in places quite impracticable (Fig. 22). On its concave side, to the south, high unscalable crags fringe the central portion of the hill and culminate in the rock pinnacle above referred to. Towards the south-west the hill runs out in a narrow rocky ridge, utterly bare throughout and for the topmost three hundred feet or so of its height very steep. The south-eastern extremity of the hill towards Bīr-kōṭ village presents a rocky crest and is also very steep. Where the slope affords room for small terraces, these are covered with the debris of stone walls marking ancient habitations and with an abundance of potsherds.

Ancient fortifications.—Above the highest of these terraces an imposing stretch of wall (Fig. 20), massively built of undressed but carefully set stone slabs, rises to a height of close on fifty feet. Extending for a distance of about 80 yards and facing to the south-east, it protected the fortified summit of the hill on that side where the natural difficulties of attack were less. At the same time the filling up of the space behind it had considerably enlarged the level area on the hill-top. This imposing wall which is clearly visible from

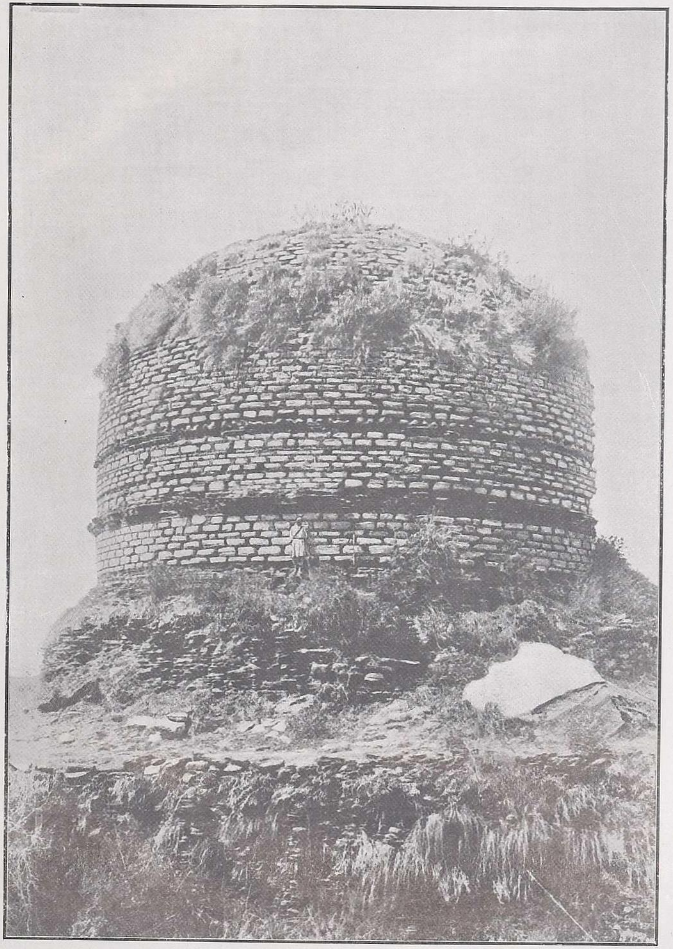

Fig. 16. Ruined Stūpa of Amlūk-dara.

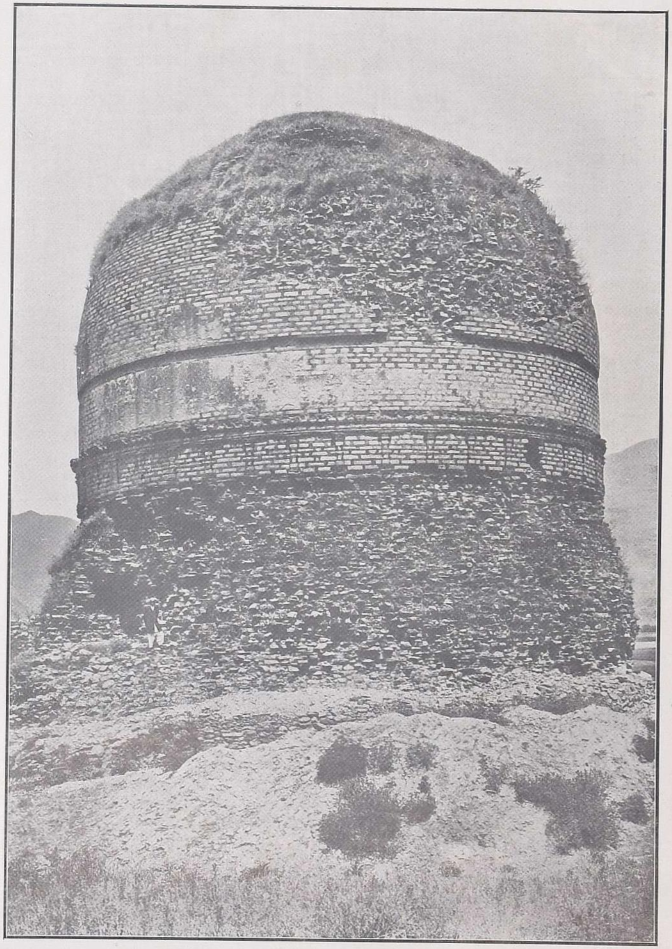

Fig. 17. Ruined Stūpa of King Uttarasena, Shankardār.

the lands by the village and river continues at approximately the same height to the north. It forms there a bastion-like projection (Fig. 21) and then with a re-entering angle rounds the head of a rocky precipitous ravine running down to the river. From there the line of the circumvallation is traceable, less massive and less well preserved, all along the steep river front. Where the wall reaches the north-western end of the fairly level ground on the fortified summit near a small mound it turns for short stretches to the south-east and south.

Here remains of small towers of bastions (Fig. 22) occupy projecting rocky knolls, and protect that face of the summit which was exposed to attack from the previously mentioned narrow ridge to the south-west. Beyond this the line of the wall can be followed only for a short distance; for the hill is at this point crowned with sheer cliffs, and no defences were needed to make the summit wholly unassailable from the plain. Here the rocky pinnacle already referred to rises steeply above the level plateau formed by the rest of the hill-top. The sides facing towards the latter bear remains of ancient masonry wherever there was room for walls. This and abundant pottery debris strewing the slopes prove that the position had been turned into a kind of citadel and occupied for a long time.

Interior of circumvallation.— The level ground of the circumvallated area on the top measures well over two hundred yards in length and more than a hundred yards at its greatest width. Plenty of low ruined walls cover the whole of it, marking decayed habitations. A mound rising to a height of about 12 feet above the bastion-like projection at the south-eastern end looked as if it hid a small completely demolished Stūpa. Another at the opposite extremity might also have been taken for a ruined Stūpa, but for the masses of broken pottery that covered it. Most of the decorated potsherds (for specimens marked Bir. see Pl. I) picked up among the debris of the site could, by the types of their incised or relievo designs, be definitely assigned to the Buddhist period.

In view of the great extent of territory over which my surveys were to take me and of the time required for the examination of other remains I could not attempt systematic excavation either here or at any other of the ancient sites that I traced. But a search merely on the surface of the line of wall protecting the north-western end of the hill-top (Fig. 22) sufficed to bring to light curious relics of ancient means of defence. We came there upon numbers of round water-worn stones of different sizes, undoubtedly brought from the river-bed, such as would be used for slings or as heavier missiles. In one heap which a little experimental digging revealed at a small ruined tower, we discovered no fewer than thirty-eight rounds of this antique ammunition.

An assured water-supply was essential for the occupation of the site as a safe place of defence. As long as the hill-top was defended it was practically impossible for an enemy to cut off access to the river. A main branch of it washes the base of the rocky northern slopes, and the steepness of the bluffs overhanging the river at this spot shows that it must have flown past them for ages. But there were defences on this side of the hill also; for as I descended

from the hill-top towards the river, in places with difficulty, I noticed remains of old walls and terraces, with abundance of ancient pottery everywhere.

Rock-cut passages towards river.—There was some reason to suppose that the occupants of the ancient fastness were not content to trust for the safety of their water-supply entirely to the natural defence provided by the precipitous slopes. I had been told of two rock-cut passages leading into the hill from above the river, and of the local tradition that they had served to make access to water still more secure. On my descent from the top I was shown the entrance to one of them at an elevation of about 180 feet above the river. The height of the entrance is only about 4 feet on the outside. But once the low doorway, built of ancient masonry of the Gandhāra type, is passed a gallery 10 feet high is entered. It is 3 feet wide and lined with masonry of the same type. It is vaulted with horizontal courses of cut slabs. In places this lining has fallen and left the rock walls bare. I could ascend the gallery for only some 16 yards up to a point where fallen rock partly blocked it. Recesses for a square bolt on either side of the doorway showed that it could be closed from the inside.

The exit of another tunnel was found farther to the east and nearer to the cliffs overhanging the river. It could be entered only with some difficulty, and looked in places more like a succession of natural rock fissures which had been utilized by man. Here too ancient masonry in places lined the rock walls. At a distance of some twenty-five yards ascent was barred by large fallen blocks of stone. Judging from local reports both passages had often been searched for treasure. Whether the two passages meet higher up, as local tradition asserts, could be ascertained only by a thorough clearing which would take time and adequate preparations. But it appeared to me very probable that one of them, if not both, were intended for the purpose above indicated.

Antiquity of occupation.—The great antiquity of the site and its prolonged occupation are abundantly attested by the plentiful coins which are found on the top and slopes of the Bīr-kōṭ hill, especially after rain. Gold or silver pieces are melted down promptly or find their way down through local Hindus to the coin dealers of Rawalpindi or Peshawar. But even so a rapid search made on my behalf at Bīr-kōṭ village produced a large miscellaneous collection of pre-Muhammadan copper coins. The specimens ranged from issues of the Indo-Greek and Indo-Parthian kings and of their Indo-Scythian successors, including the great Kushān rulers of the first centuries A.D., down to the mintages of the 'Hindu Shāhī' dynasty which finally succumbed to Maḥmūd of Ghazna about the close of the tenth century. Most numerous are pieces issued by Azes, Azilises and other Scythian kings who exercised extensive rule on the north-western confines of India during the first century B.C. as well as copper coins of the great Kushān emperors who succeeded them.

But coin finds of the same early periods are not confined to the Bīr-kōṭ hill alone. They are frequent, too, at the numerous sites marked by the remains of Buddhist sanctuaries and ancient habitations around Bīr-kōṭ and in the side valleys that debouch there. They conclusively prove that Bīr-kōṭ must

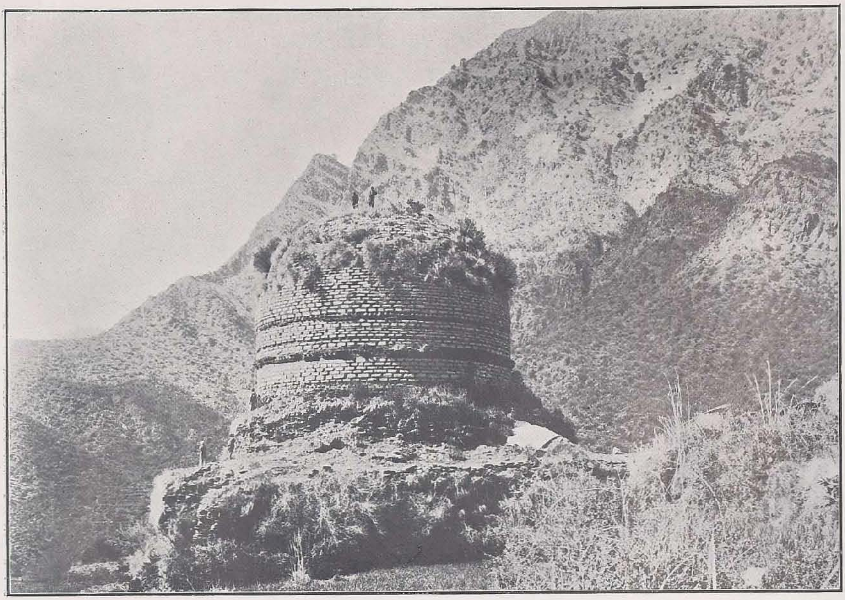

FIG. 18. STŪPA OF AMLŪK-DARA SEEN FROM SOUTH-EAST.
Note men standing on base and on top of dome.

FIG. 19. NORTH-WESTERN SPUR WITH BASTION, RĀJA GIRĀ'S CASTLE, UḌEGRĀM.

have been the centre of a populous and flourishing tract during the centuries which immediately preceded and followed the time of Christ. It is equally clear that the advantages which the isolated rock-girt hill of Bīr-kōṭ offered, both by its natural defensive strength and its central position on the great highway of Swāt, were bound to be appreciated long before the period from which the oldest of those coins date.

Only systematic excavation could reveal how far back the earliest occupation of the stronghold dates. But that it already existed when Alexander made his triumphant advance to the Indus and beyond it to the plains of the Panjāb can, I believe, be proved by a comparison of the topographical and archæological facts with the notices of Alexander's historians regarding his operations in this region and the siege of *Bazira* or *Beira* in particular.

CHAPTER II.—SCENES OF ALEXANDER'S OPERATIONS IN SWĀT

SECTION i.—THE LOCATION OF BAZIRA

Before I proceed to set forth the antiquarian and topographical indication which make it possible for us to recognize in the hill fastness of Bīr-kōṭ one of the localities definitely mentioned in connexion with Alexander's campaign to the west of the Indus, it will be necessary rapidly to review the main historical data to be gathered about that campaign from the available classical records. These notices have been often discussed, and as a clear and critical account of them is readily accessible in the late Mr. Vincent Smith's 'Early History of India,'[1] our review may be brief. Alexander in the spring of 327 B.C. crossed the Hindukush from Bactria towards the Kōh-i-dāmān above Kābul. There he strengthened the hold he had secured upon this part of the present Afghānistān two years before,[2] and then set out for his Indian campaign. There can be no doubt that as far as the country west of the Indus was concerned this enterprise meant, in theory at least, but a reassertion of the sovereignty of that Persian Empire to which he claimed succession and which down to the last Achaemenidian 'King of Kings' had its satrapies right up to the Indus. At Nikaia, a place not yet exactly determined, in the upper valley of the Kābul river, he divided his army. One large force was to move to the tract of Peukelaotis (Sanskrit *Pushkalāvatī*, safely located near Chārsadda north-east of Peshawar) and to effect the submission of the country as far as the Indus. The other corps was led by Alexander himself into the hill country to the north of the Kābul river, obviously with a view to securing the flank of his main line of communication along it.

[1] See 2nd edition, pp. 45 sqq. Full translations of the notices furnished by Arrian, Diodorus, Curtius and some minor sources are to be found in M'Crindle, 'The Invasion of India by Alexander the Great' (1893).

[2] Regarding the chronology of Alexander's preceding operations in the Kābul region, cf. Hogarth, *Philip and Alexander of Macedon*, pp. 296 sqq.

Alexander's route into Swāt.—The details of the route followed on Alexander's operations against various towns by 'the river called Khōes' and against the tribe of the Aspasioi cannot be determined. But it may be considered as certain that they took him for a considerable distance up the large and populous valley of the Kūnar river.[3] Geographical facts make it equally clear that the scene of subsequent operations, when he had crossed the mountains and moved east,[4] was the present Bājauṛ. This is rendered quite certain by the mention of the river Guraios, which had to be passed by the Macedonians before Alexander could lead them into the country of the Assakēnoi; for the identity of the Guraios with the Panjkōra, coming from the mountains of Dīr and flowing east of Bājauṛ before it joins the Swāt river, is well established.[5] No definite attempt can be made to identify the localities mentioned west of the Guraios, as long as Bājauṛ remains inaccessible for research.

With the passage of the Guraios or Panjkōra we are brought close to the territory which directly concerns us here; for it has long ago been recognized that the country of the powerful nation of the Assakēnoi, the invasion of which was begun after crossing the river, could be no other than Swāt. The numerical strength of the nation and the size of the territory held by it are sufficiently indicated by the numbers recorded by Arrian for the army ("2,000 cavalry and more than 30,000 infantry, besides 30 elephants") which had gathered to oppose Alexander's advance. Yet we are told that when the barbarians saw Alexander approaching they did not dare to encounter him in the open, and dispersed to their several cities in order to defend them.[6]

Assakēnoi inhabitants of Swāt.—From this and the account of the several sieges which followed the inference seems justified that the Assakēnoi, though a brave race, could not have been addicted to those fierce and very effective methods of fighting which make the present hill tribes along the barren parts of the North-West Frontier so formidable opponents on their own ground. From the superior type of the abundant structural remains still extant in Swāt from early Buddhist times, and from what we know through the Chinese pilgrims' account of the character of its inhabitants at a later period, it may, in fact, be safely concluded that the material civilization and culture prevailing in that region in Alexander's time and for centuries after was far higher than those to be met with there now, or among the semi-barbarous Pathān tribes holding the barren hills from the Mohmand country down to Wazīristān. Nor should it be forgotten that the possession of lands so fertile as those of Swāt, combined with the enfeebling effect of the rice cultivation preponderant in its valleys, tends to have a debilitating influence on the inhabitants. This is

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[3] See my remarks on the importance of the Kūnar valley and the indications pointing to its having been the scene of those operations, in *Serindia*, i. p. 3.

[4] *Cf.* Arrian, *Anabasis*, IV. xxiv.

[5] See *Serindia*, i. p. 2, note 2. The difficulty of the passage across the Guraios which Arrian, IV. xxv, specially comments upon, is illustrated by the experience of the British forces when operating against Bājauṛ from the Swāt side and across the Panjkōra in 1905 and 1907.

[6] *Cf.* Arrian, *Anabasis*, IV. xxv.

FIG. 20. SOUTH-EASTERN PORTION OF FORTIFICATIONS ON BĪR-KŌṬ HILL.

Snow-covered head of Mount Ilam in distance.

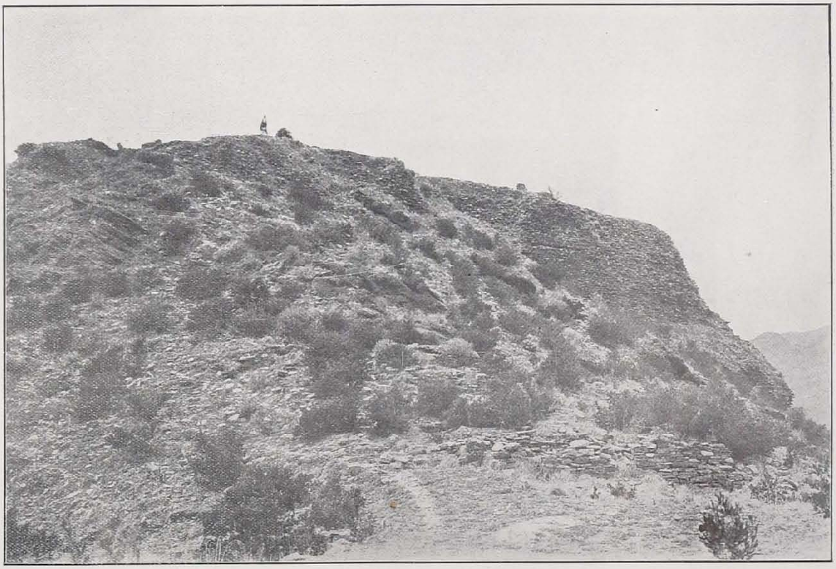

FIG. 21. NORTH-EASTERN BASTION ON BĪR-KŌṬ HILL.

Note man on top of wall.

apparent even among the present Pathān population, and must have asserted itself also in the case of its earlier occupants.

As regards the ethnography of the region through which Alexander's hill campaign took him, two points may conveniently be noted here. That the invaders classed the inhabitants as Indians is certain. This fully agrees with what we know from later records about the Indian character of the civilization and religion which prevailed before the Muhammadan conquest along the whole Kābul river valley from the Hindukush to the Indus. At the same time there is good reason to believe that the languages then spoken in the region and in the adjacent hill tracts, including Swāt, were not Indian, but belonged to that independent branch of Aryan speech, designated as Dard or Dardic, which still has its representatives in the valleys south of the Hindukush from Kāfiristān to Kashmīr. In fact, I have shown elsewhere that the very name *Assakēnoi*, in its relation to the corresponding Sanskrit form of *Aśmaka*, as attested among tribal designations of the Indian North-West, bears distinct philological evidence to the Dard speech of those to whom it was applied.[7]

Swāt the territory of the Assakēnoi.—That the territory held by the Assakēnoi was a large one and comprised the whole of the present Swāt, together probably with Bunēr and the valleys to the north of the latter, is clear; for the operations which were needed for their effective subjugation, extended, as the classical records show, from the Panjkōra to the right bank of the Indus. The accounts given by both Arrian and Curtius of these operations, though recorded in some detail, do not suffice—in the absence of local investigations—to fix with any critical assurance the position of the sites which they mention. Only for the initial stages of Alexander's march through this large territory was definite guidance available, and that supplied by the geographical facts. It is certain that in ancient times, as at present, the direct route, and the only one of any importance, must have led from the Panjkōra through Talāsh and across the easy saddle of Katgala into the wide open valley which stretches down from Wuch to the Swāt river and to its strategically important crossing now guarded by the fort of Chakdara.

Beyond this the only indication to be derived from geography is the very general one that the several strong places in which the Assakēnoi had taken refuge, and which Alexander successively besieged and captured, are likely to have been situated in the main Swāt valley which at all times just as now must have been the most fertile and populous portion of the territory. Arrian, whose account of Alexander's campaign is throughout the most reliable and avowedly based on a careful examination of sources largely contemporary, distinctly tells us that Alexander "marched first to attack Massaga, which was the greatest city in those parts." The reference made to its chief under the name of Assakēnos shows that Massaga was considered the capital.

Alexander's siege of Massaga.—Arrian gives a lengthy account of the siege which, after battering engines had been brought up against the walls

[7] See *Serindia*, i. pp. 4 sq.

and the chief killed, ended with the city's capitulation. But he furnishes no clue as to the position of Massaga; nor does the elaborate description recorded by Curtius (VIII. x) of the defences with which both nature and man had provided the city (called by him *Mazaga*), help us to locate it at present. At none of the sites so far examined by me have I been able to find topographical features resembling those which this description indicates.[8] Until further search can be made on the ground, I must content myself with expressing the belief that the site of Massaga may probably have to be looked for farther down in Swāt than has hitherto been supposed. Owing to the great expanse of fertile alluvial soil which is to be found there, Lower Swāt must at all times have been a very populous and rich portion of the whole valley. Its economic and military importance must have been greatly increased in ancient times, just as it is now, by the ease of direct access from it to the open plain of Gandhāra. It appears to me on various ground very unlikely that Alexander, having been brought by his route from Bājauṛ and the Panjkōra straight to Lower Swāt, could have carried his operations far up the main valley, as has been supposed,[9] before he had secured his rear and the direct line of communication with the rest of his army on the lower Kābul river. For this it was necessary first to defeat such resistance as that important lower portion of Swāt was bound to have offered to the invader.

Mercenary auxiliaries of Assakēnoi.—Two points recorded in connection with the capture of Massaga deserve to be briefly noted here. One is the mention made of 7,000 Indian mercenaries brought from a distance who shared in the defence of the place, and ultimately after its capitulation made a vain endeavour to regain their homes and in that attempt were exterminated. The employment by a local chief of so large a paid contingent from outside clearly indicates conditions of organized defence wholly different from those with which a modern invader of tribal territories on the North-West Frontier would have to reckon. In the second place attention may well be called to the fact that in spite of the recorded great valour of the defenders. Arrian's account puts the total loss suffered by Alexander in the course of the four days' siege at only twenty-five men. In the cheap price paid for this success we may recognize a proof of the ascendency which the Macedonian force of highly trained and war-hardened veterans derived, in addition to all other advantages, from the possession of superior armament; for both Arrian and Curtius specially testify to the over-mastering effect which the use of the besiegers' war engines, including movable towers and powerful ballistae, had upon the defenders.

Arrian on operations before Bazira.—For tracing the further course of Alexander's operations in Swāt we can fortunately avail ourselves of archæo-

[8] "For on the east, an impetuous mountain stream with steep banks on both sides barred approach to the city, while to south and west nature, as if designing to form a rampart, had piled up gigantic rocks, at the base of which lay sloughs and yawning chasms hollowed in the course of ages to vast depths, while a ditch of mighty labour drawn from their extremity continued the line of defence. The city was besides surrounded with a wall 35 stadia in circumference," etc.; *cf.* M'Crindle, *Invasion of India*, pp. 194 sq.

[9] See V. Smith, *Early History of India*, p. 50.

logical as well as topographical indications. Arrian [10] tells us that Alexander

"Then dispatched Koinos to Bazira, believing that [the inhabitants] would capitulate on learning of the capture of Massaga. He further sent Attalos, Alketas, and Demetrios the cavalry leader to Ōra, another town, with instructions to invest the town until he himself arrived. A sally made from the latter place against the troops under Alketas was repulsed by the Macedonians without difficulty and the inhabitants driven back within their walls. With Koinos matters did not fare well at Bazira; for its people trusted to the strength of the position, which was very elevated and everywhere carefully fortified, and made no sign of surrender.

"Alexander on learning this set out for Bazira. But having come to know that some of the neighbouring barbarians, prompted to this by Abisares,[11] were preparing by stealth to enter Ōra he first marched to Ōra. Koinos was instructed to fortify a strong position in front of Bazira, to leave in it a garrison sufficient to keep the inhabitants from undisturbed access to their lands, and to lead the rest of his force to Alexander. When the people of Bazira saw Koinos departing with the greatest portion of his troops, they made light of the [remaining] Macedonians as antagonists no longer equal to themselves and descended to the plain. A sharp encounter ensued in which five hundred barbarians were killed and over seventy taken prisoners. The rest fled together into the town, and were more strictly than ever debarred from access to the land by those in the fortified position."

Subsequently we are told, when the inhabitants of Bazira learned of the fall of Ōra they lost heart and at the dead of night abandoned the town.

Bazira located at Bīr-kōṭ.—The convergent evidence of position, remains, and name enables us to locate Bazira with confidence at the ancient stronghold marked by the ruins on the Bīr-kōṭ hill. To take the topographical indications first, it is clear that Alexander, having made himself master of Lower Swāt, had necessarily to turn his attention next to this strong place of the 'Bīr Castle,' which lay quite close to what nature has made the great highway up the Swāt valley. The Bīr-kōṭ hill exactly answers the description Arrian gives of the position of Bazira 'which was very elevated and strongly fortified.' It is easy to understand why, in spite of the impression which the preceding capture of Massaga must have produced, no rapid success could be gained there by the force under Koinos.

It is equally clear why Alexander, while himself marching upon Ōra, situated higher up the valley as we shall see, was content instead of attempting a direct siege of Bazira, to leave a small portion of Koinos' troops behind for the purpose of masking the fastness. Considering its great natural strength, nothing less than an arduous and protracted siege could hold out promise of success. It was, moreover, a position from which it was easy for Alexander's opponents to block the main route leading up the Swāt valley and thus to interfere with any operations that Alexander might wish to carry out in that direction. Hence the order to Koinos 'to fortify a strong position in front of Bazira' and 'to leave in it a garrison sufficient to keep the inhabitants from undisturbed access to their lands.' Where that fortified camp is likely to

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[10] *Cf.* Arrian, IV. xxvii, 5; M'Crindle, *loc. cit.*, pp. 69 sq.

[11] By Abisares is meant the king of the territory known from Sanskrit texts by the name of *Abhisāra* and located in the lower and middle hills between the Jhelam and Chenāb rivers; in Alexander's time it comprised also Hazāra; see Stein, *Rājataraṅgiṇī*, transl., I, pp. 32 sq., and below, p. 39.

have stood it is impossible to state with any certainty. But from what I saw of the ground it appears to me that the elevated area now occupied mainly by graveyards just above the point where the streams coming from the Karākar and Kandag valleys meet, about half a mile from the foot of the Bīr-kōṭ hill, would have well served the tactical needs in view.

Name of Bīr-kōṭ derived from Bazira.—On the philological side it is easy to prove that the name *Bīr-kōṭ*, "the castle of Bīr," preserves in its first part the direct phonetic derivative of the ancient name which the Greek form *Bazira* was intended to reproduce. The Greek letter ζ, *z*, was regularly used to render both the palatal media *j* and the palatal semi-vowel *y*, two sounds common in the Indo-Aryan and Dardic languages but not known to the Greek alphabet, and *vice versâ*. This is conclusively shown by the evidence of Greek transcriptions of indigenous names belonging to the very region and period with which we are here concerned. Thus in the Greek legends of coins issued by rulers on the North-West Frontier within three centuries of Alexander's invasion we find the name of an Indo-Parthian Satrap who is called *Jihuṇia* in the Kharoshṭhī legend of his coins rendered by *Zeionises* in the Greek legend of the obverse, while the name of the Greek king *Zoilos* is reproduced in Kharoshṭhī script on the reverse of his coin as *Jhoila*.[12] The two Indo-Scythian kings who are known from their Greek legends as *Azes* and *Azilises* and whose coins are found with exceeding frequency at sites of Swāt, are called *Aya* and *Ayilisa* in their Kharoshṭhī legends. On the Greek side of the coinage issued by the founder of the Kushān dynasty his name appears as *Kozulo Kadphises* while the Kharoshṭhī legend of the reverse renders it by *Kujula Kasa*.[13] Similarly we find the early Turkish princely title of *jabgu* on the coins of the Kushān Kadaphes reproduced by *Zaoou* in the Greek writing of the obverse, and by *Yaüa* in the Kharoshṭhī of the reverse.[14]

From the restored form **Bajira* : **Bayira* it is not difficult to trace the gradual phonetic change into *Bīr* or *Bir*. In the development of all Indo-Aryan languages, as illustrated by the transition from Sanskrit into Prakrit and from this into the modern Indo-Aryan vernaculars, the elision of inter-vocalic mediæ *j* and *y* is a well-known rule, and this holds good also of the related Dardic languages.[15] The subsequent reduction of the resultant diphthong *ai*, as in **Baira*, into *ī* or *i* is a phonetic change for which analogies are equally plentiful in the two language groups.[16] In the same way the disappearance of the final short vowel under the influence of the stress accent on the penultimate conforms to a phonetic law uniformly observed in all modern Indo-Aryan and Dardic vernaculars.[17] Thus we can account without

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[12] See, *e.g.*, Whitehead, *Catalogue of Coins in the Punjab Museum*, I, pp. 65, 157.

[13] *Cf. ibid*, I, pp. 10 sqq., 179. On certain coins of Kozulo Kadphises and of Kadaphes, his supposed successor, the first part of the name is rendered by the Kharoshṭhī legend as *Kayala* or *Kuyula* ; cf. *ibid.*, pp. 108 sqq.

[14] See Marquart, *Ērānšahr*, pp. 208 sq.

[15] *Cf.* Grierson, "Paiśācī, Piśācas, and Modern Piśāca," *Z. D. M. G.*, 1912, p. 79 ; *The Piśāca languages of North-Western India*, pp. 109 sq.

[16] See Grierson, "The Phonology of the Modern Indo-Aryan Vernaculars," *Z. D. M. G.*, 1895, pp. 407 sq., 419,

[17] *Cf.* Grierson, *loc. cit.*, p. 400.

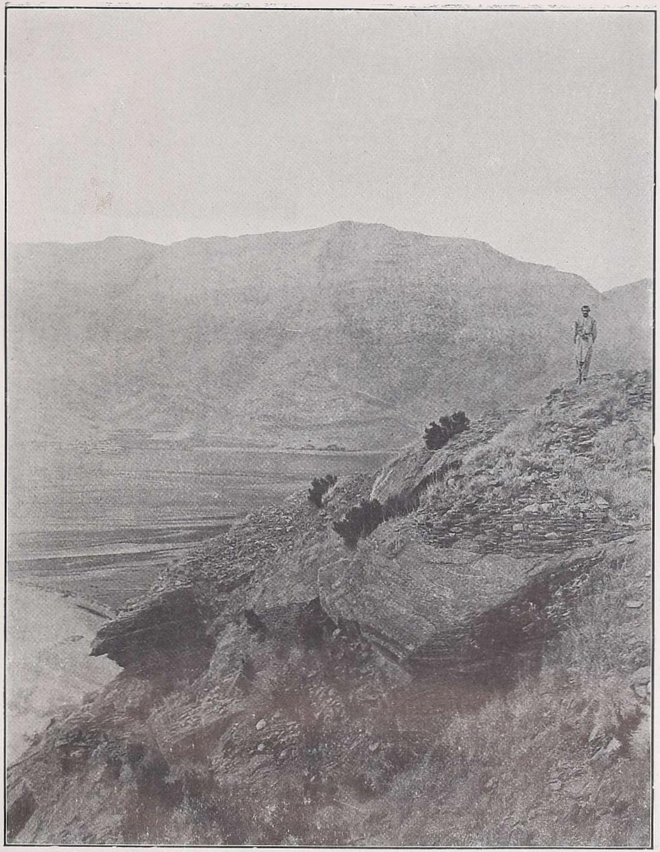

Fig. 22. Ruined towers at north-western end of Bīr-kot hill.

Swāt river seen below in left corner.

Fig. 23. Walls crowning crest of hill, Rāja Girā's Castle.

On highest point ruins of tower known as Takht.

any difficulty for the successive change of **Bajira* (*Bayira*) >**Baira*> *Bīr*. The addition of the designation *kōt*, "castle, fort" (Sanskrit *koṭṭa*), to the name is readily understood, the term *kōṭ* being generally applied to any fortified place throughout the North-West of India, whatever the language spoken.[18]

Curtius' reference to Beira (Bazira).—In view of what has just been stated as to the probable pronunciation of the name recorded by Arrian as *Bazira*, it is of special interest to note that we find the same place mentioned by Curtius under the name of *Beira*.[19] His notice, very brief, follows upon the account of the operations which Arrian more clearly relates as having taken place in the country of the Aspasioi and Gouraioi, *i.e.*, in Bājaur. We are told that Alexander, "having crossed the river Khoaspes, left Koinos to besiege an opulent city—the inhabitants called it Beira—while he himself went on to Mazaga." I have elsewhere indicated the reasons for believing with Professor Marquart that by the Khoaspes the Panjkōra is meant, which Arrian more correctly calls Guraios.[20] Though Curtius, manifestly by error, makes the siege of Beira simultaneous with, instead of subsequent to, that of Mazaga (Massaga), yet there can be no doubt, in view of the reference to Koinos, that the Beira he mentions is identical with Arrian's Bazira. His form of the name is obviously but another attempt to reproduce the indigenous designation of **Bajira* or **Bayira*.

Curtius tells us nothing more of the stronghold now safely located at Bīr-kōṭ. From Arrian, too, we only learn that the people of Bazira, when they heard of the fall of Ōra, "lost heart and at the dead of night abandoned the town; [they fled to the rock]. Thus the other barbarians, too, did; leaving their towns, they all fled to the rock in that country called Aornos." Before we follow Arrian's narrative further in order to look for the probable site of Ōra and then to trace the true position of that much-discussed fastness of Aornos, I may note here two observations bearing on this flight of the people of Bazira. One is that in the text of Arrian the words of which the rendering has been put above into brackets have been treated as an interpolation, rightly as it seems, by some editors. Hence the text does not necessarily imply that they too fled to the 'rock' of Aornos. The other is that topographical considerations seem to me distinctly averse from this interpretation.

Refuge sought by people of Bazira.—We shall see that the position of Aornos must certainly be looked for close to the Indus. Now the shortest distance from Bīr-kōṭ to any point on the right bank of the Indus where a hill fastness corresponding in general features to Aornos could possibly be situated, is over 32 miles as the crow flies, and to the spur of Pīr-sar where I believe Aornos to be located is fully 40 miles. The straight line, to which these measurements apply, would lead right across a succession of steep hill ranges, and

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[18] The term *kōṭ* is quite common in local names of Hindukush valleys, like Darēl and Tangīr, where Dardic languages are spoken, and is also separately used in Pashtu.

[19] See *Historiae Alexandri*, VIII. x.

[20] *Cf.* Stein, *Serindia*, i. p. 2, note 2; Marquart, *Untersuchungen zur Geschichte von Erān*, II. pp. 243 sq.

if a route following easier ground along valleys and across passes were chosen, the distance would certainly be still greater. One such route, as the map shows, would have led up the main Swāt valley and thence across one of the passes eastwards to the Indus. But this route was in all probability barred by the Macedonian main force operating, as we shall see, higher up on the river.

A nearer and far safer line of retreat would have lain to the south-east up the Karākar valley, which descends straight to Bīr-kōṭ from the main Swāt-Bunēr watershed; by it the fugitives could have reached within little more than a single night's march a mountain refuge as secure as any that might be sought by them far away on the Indus. I mean Mount Ilam, that great rocky peak, rising to 9,237 feet above sea-level, which dominates the watershed range between Upper Swāt and Bunēr, and with its rugged pyramid-shaped summit forms a very conspicuous landmark for both territories. The top of Mount Ilam is girt on all sides with crags and very precipitous slopes which would render an attack upon those holding it practically impossible. The top is formed by two distinct rocky eminences enclosing a hollow space which holds a spring and affords room for a small camp. Sacred legends have clung to this mountain since Buddhist times, as we shall see below,[21] and its top is still the object of an annual pilgrimage by the Hindus of Swāt and neighbouring parts. A track used by modern pilgrims leads up to Mount Ilam from the side of Bīr-kōṭ through the picturesque side Nullah of Amlūk-dara, already described. The distance from Bīr-kōṭ to the top may be estimated at about 11 miles. In view of these local observations the suggestion appears to me justified that the place of safety sought by the fugitives from Bazira was much more likely to have been Mount Ilam than the distant Aornos by the Indus.

SECTION ii.—THE STŪPA OF SHANKARDĀR

The definite identification of Bazira (or Beira) with the ancient fortress of Bīr-kōṭ may help us to locate also the town of Ōra which Arrian's account of Alexander's operations after the fall of Massaga brings into relation with the siege of the former. Before however I proceed to describe the remarkable hill stronghold where Ōra may with great probability be placed, it is necessary to give an account of Buddhist remains of distinct archæological interest passed on the way to it up the valley.

On the morning of March 19th having dispatched my camp from Bīr-kōṭ to the large village of Uḍegrām up the valley I proceeded to visit the great Stūpa of Shankardār (Fig. 17). It is situated two miles to the north-east of Bīr-kōṭ village by the left side of the road leading to Saidu where it skirts the mouth of a small glen descending from a bare spur above the valley plain. I had already heard of this huge pile in 1897 and had even been able then to catch a distant glimpse of it through my glasses from the top of the Lan-

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[21] *Cf.* below pp. 101 sqq.

dakai ridge. I found it, alas, in a sad state of ruin. Owing to its situation by the main road of the valley and close to a series of villages lining the fertile alluvial lands by the river it had suffered terrible damage; for the whole village of Shankardār, just below the ruin, and probably others also up and down the road had utilized the abundant stone material offered by this convenient quarry.

Structural features of ruined Stūpa.—All round the bases, the first of which was certainly square and very large, not only the well-carved facing stones but also the greater portion of the interior masonry had been removed, as seen in Fig. 17. Through what remained of the lowest base the Bādshāh's new road had been cut to avoid a detour through the village. The havoc thus wrought made it impossible to determine the exact dimensions of the ground plan. On the other hand the destruction of the bases has added to the impression created by the height of the Stūpa. From the rough measurements taken and shown in the rough section, Pl. 4, the diameter of the dome and drum appeared to be about 62 feet which is less than that observed at the Stūpa of Amlūk-dara, and the height of the drum, decorated with two cornices, fully 16 feet. The extant height of the dome measured over the curvature is about 40 feet. Adding to these measurements the 34 feet measured between the foot of the drum and the lowest course of masonry laid bare in the cutting made for the road, we arrive a total height of 90 feet for the Stūpa in its present sadly damaged state.

The surviving masonry facing shows as at Amlūk-dara large dressed slabs of white stone divided sideways by small columns of dark slaty pieces and narrow horizontal 'packing' between the courses. In places remains of originally white stucco covering the outside of the drum can be seen. A peculiar feature of the drum is the decoration of the lower portion to a height of 6 feet with pilasters, projecting but slightly and bearing rather flat brackets (see Pl. 4). The cornice above them is about 2 feet high and comprises a plain course of slabs and above this a projecting 'chajja' carried by thin slabs set vertically on their shorter edge. The upper cornice is marked by a shallow recess, about 1½ feet high, producing a light-and-shade effect. A large cutting made on the north-western side of the dome now renders the broken top of the Stūpa accessible. By digging down in the centre the masonry lining of a shaft about 5 feet square has here been laid bare. This excavation appears to have been carried down only to about 15 feet from the present top of the dome. Hence it is possible that the mass and solidity of the masonry have here defeated the efforts of treasure-seekers, and the central deposit may still be intact.

Hsüan-tsang on Stūpa of King Uttarasena.—Poorly preserved as this great Stūpa is it claims a special antiquarian interest for there can be little doubt that it is identical with the Stūpa whose construction a local tradition recorded by Hsüan-tsang attributed to Uttarasena, an ancient king of *Wu-chang-na* or Swāt. As the *Hsi-yü-chi* tells us, "to the south-west of the town of *Mêng-ch'ieh-li*, about 60 to 70 li, and to the east of a great river there is a Stūpa, about 60 feet high, erected by King Uttarasena (Chin. *Shang-chün*).

Once when the Buddha was about to enter Nirvāṇa he called the gathering [of disciples] and said:

"After my Nirvāṇa Uttarasena, king of Wu-chang-na (Udyāna) ought to receive a portion of my relics. When the kings were going to divide them equally among themselves, king Uttarasena arrived after the others, and at once this delay was attributed to a sentiment of contempt and disrespect. Then the gods proclaimed once more the last words of the Buddha, Thereupon the king obtained an equal share of the relics. Taking them he returned to his kingdom where he erected a Stūpa to honour them.

"Near by, on the bank of a great river, there is a huge rock which has the shape of an elephant. Of old when king Uttarasena returned to his country he had the relics of the Buddha carried on a white elephant. When he had arrived at this spot, the elephant suddenly dropped down and dying changed himself into a rock. By the side of this rock the king at once erected his Stūpa."[1]

Rock of 'Elephant's head.'—To Sir Harold Deane belongs the merit of having long ago correctly recognized king Uttarasena's relic tower in the great Stūpa of Shankardār of which he had learned from native information.[2] He also rightly pointed out the identity of the rock mentioned in Hsüan-tsang's legend with the high cliffs which form a conspicuous landmark near the village of Ghalēgai above Shankardār. There about half a mile from the ruined Stūpa the road passes round the foot of a bare precipitous rock face which, as the photograph, Fig. 24, shows, when seen from a short distance, bears a very striking resemblance to the head and trunk of an elephant. As if to prove the veneration with which pious eyes used to look up at it, I found the head of a roughly cut relievo image, probably of a Buddha, emerging above rock debris at a point about 150 yards before passing below the elephant rock. Muhammadan zeal had taken care to heap up stones here and to damage the rock-carved head.

The position of king Uttarasena's Stūpa and of the rock of the elephant which local legend connected with it in Hsüan-tsang's time is quite correctly described by the pilgrim. Shankardār lies close to an eastern branch of the Swāt river and its bearing and distance from Manglawar where, as we shall see, Mêng-ch'ieh-li or Mangalapura, the Swāt capital in Hsüan-tsang's time, has to be located, agree accurately with the map. The distance by road is about 13 miles, the equivalent of 60-70 *li*, taking the *li* at the value of about one-fifth of a mile, as usually applicable to Chinese road measurements in the 'Western regions.'

Relievos in Hindughār grotto.—About fifty yards beyond the relievo image an interesting rock carving has fortunately survived in a better condition, no doubt, owing to its less exposed position. There a small natural grotto known as *Hindughār* (the 'Hindu cave'), some forty feet above the road, is reached by clambering, not without some difficulty, over narrow ledges on the precipitous face of the cliff. Near the entrance of the grotto, and on the right hand side of it, a remarkable relievo is carved from the rock (Fig 25).

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[1] See Julien, *Mémoires sur less contrées occidentales*, i. pp. 139 sq.; Watters, *Yuan Chwang*, i. p. 236.

[2] See Deane, 'Notes on Udyāna and Gandhāra,' *J. R. A. S.*, 1896, p. 660.

[3] *Cf. Serindia*, ii. pp. 734 sq.; also references in Index, iii. p. 1544.

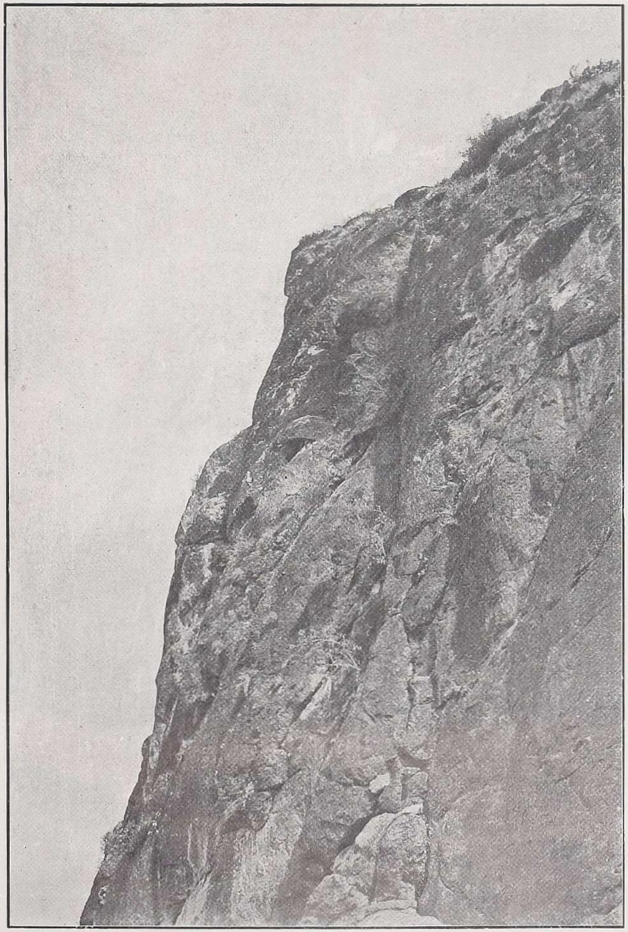

Fig. 24. Rock face resembling elephant's head, near Ghalēgai.

Fig. 25. Rock-carved image of king in grotto above Stūpa of Shankardār.

This, about 4 feet high and about as broad, has also suffered to some extent from iconoclast hands, but the essential parts can still be made out. In the middle, on a pedestal supported by six lions, there is represented a bearded figure standing flanked on either side by smaller much damaged images. The large flame halo rising from the shoulders and the dress of the central figure clearly mark it as a royal personage. The costume comprises a long coat falling stiffly over bulging trousers stuck into top-boots like the 'Chāruks' of Turkestān. A kind of pelisse or mantle hangs from the shoulders. The arms clad in heavy sleeves look as if carrying in front some object no longer recognizable. Could it have been the model of a Stūpa? The face badly injured appears to have been turned three-quarters to the right proper.

Facing this royal personage on the left there can just be made a much smaller kneeling figure in the act of making an offering. A corresponding figure on the right is almost completely effaced. On either side of this inner group stands a pair of two small figures, one above the other, all of them haloed and now much injured. The character of the upper one on the right is no longer recognizable; the one below seems to be dressed like the king in the centre, with the left hand resting on a sword and the right holding a spear (?). Of the figures on the left the upper one appears to be seated, with the right leg hanging down as usual with Bodhisattvas represented in the *varamudrā* pose, and to hold a flower or other object in the right hand. The figure below seems to have resembled the corresponding one on the right, but is now almost completely effaced. Further to the left, half way up, there is seen a small standing figure which judging from the curving hips appears to be female, with one arm raised to the shoulder.

Costume of king's figure.—It may be difficult exactly to interpret all the secondary figures of this interesting group, and owing to the inequality and cramped nature of the ground it would be very difficult to obtain adequate photographs of them without special arrangements. But there can be no doubt about the close resemblance of the king's dress to that in which the rulers of the great Kushān dynasty are represented on their coins and their very rare sculptures. It appears to me probable that a representation of pious king Uttarasena is here intended, and that the artist, commissioned to raise this monument to the saintly memory of the founder of the great Stūpa near by, showed him clad like the rulers of his own time. These, as their coins prove, still retained on the Indian frontier the heavy costume brought from their Central-Asian homeland,—anyhow while paying their cold weather visits to their conquered dominion in the plains.

The remainder of that day's march to Uḍegrām led past a succession of large villages, Māniār, Nawe-kile, Pajigrām and Gōgdara, all of them owning fertile lands by the river; it offered no further opportunities for archæological observations. But subsequently during my stay at Uḍegrām I was able to visit ruins of a Buddhist site above Gōgdara, and a description of these may conveniently find a place here.

Proceeding from our camp near Uḍegrām to Gōgdara, about a mile off to the south-west, I visited first an 'inscribed rock' reported not far from the roadside. It proved a roughly carved and much injured relievo situated at about half way at the foot of the hillside. It showed the figure of a colossal Buddha seated on a Siṁhāsana with two smaller attendants on the sides. The Buddha figure measures 5 feet across the knees and 5½ feet in height. Two small relievo figures carved below it to the left were altogether unrecognizable.

Ruined Buddhist monastery above Gōgdara.—On ascending a small bare Nullah opening to the south-east from the village of Gōgdara, there is reached about 400 feet higher up a small spring sheltered in a rock fissure. Its presence accounts for the ruins of a small Buddhist monastery found here. They are known as Hassan-kōṭē. The principal ruins of which Pl. 4 shows a sketch plan are found on a terrace stretching approximately east to west at an elevation of about 50 feet above the spring. There is a row of small rooms of varying length but all 8 feet wide and all still retaining their vaulting. Light is provided by windows, only 6″ square on the outside but much splayed out to a width of 2 feet within. At the eastern end of this flight of rooms a staircase, *a*, now filled with debris could be traced leading down to what seem to have been a lower floor or a cellar; a block of masonry in *b* served, perhaps, to support stairs giving access to an upper floor or the roof. Beneath the westernmost four rooms there stretches a long chamber, also vaulted with horizontal courses. This building evidently contained monks' quarters. At its north-western corner it is adjoined on a somewhat lower level by remains of walls of a rectangular structure which judging from its size, 36 by 25 feet, might have served as a meeting hall for the Saṅgha. On the opposite side of the terrace, some 23 yards from *a*, the base, 20 feet square, of a completely demolished small Stūpa could be traced.

On a lower terrace to the north there survive two narrow chambers, vi, 32 feet long but only 6 feet wide, one above the other, and each 10 feet high to the centre of their vaulted ceiling. The upper chamber has a square opening in its ceiling to admit light. Immediately to the west of this structure there survive in places remains of walls of a small rotunda rising only to a few feet above the ground. It evidently was a shrine, with walls about 4 feet thick and having an outside diameter of 16 feet. Decayed walls of detached dwellings, also of Buddhist times, were visible on terraced ground above the spring and at some distance to the north of the monastery.

SECTION iii.—UḌEGRĀM AND RĀJA GIRĀ'S CASTLE

Uḍegrām where I spent three days, March 20-22, over busy work, is a large place with over four hundred households. It is pleasantly situated at the foot of the hills at a point where the fertile and well irrigated riverine plain attains its widest in Upper Swāt. The 'inscribed stone' previously re-

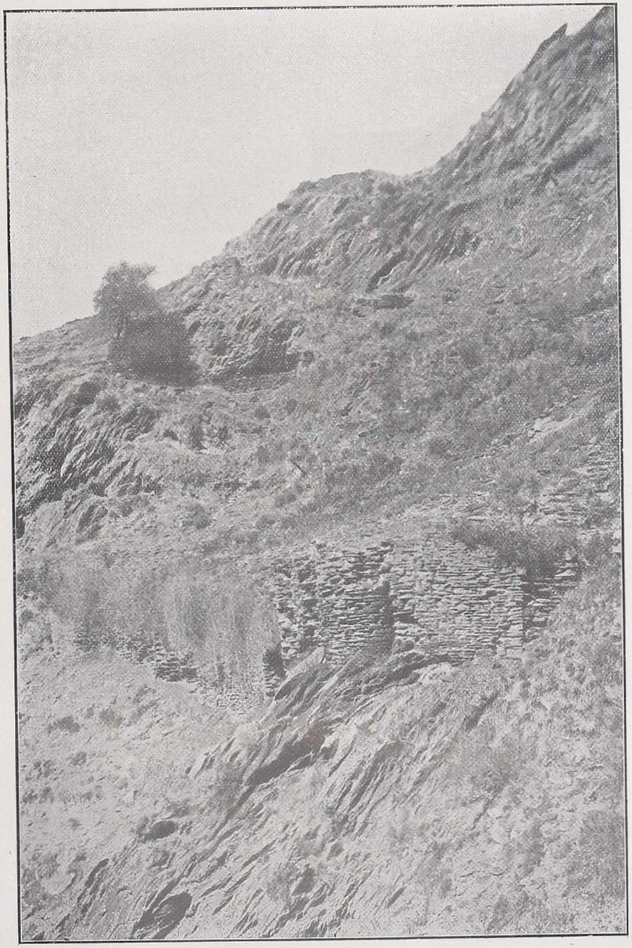

Fig. 26. Ruined tower on wall line guarding spring, Rāja Girā's Castle.

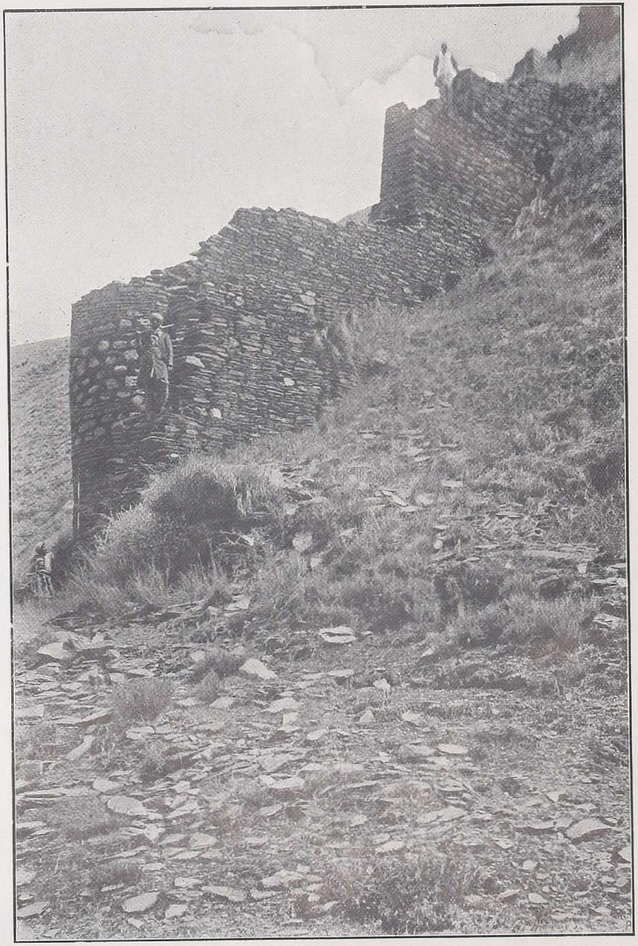

Fig. 27. Wall on north-eastern spur, Rāja Girā's Castle.

ported there proved indeed nothing more than a detached rock, about 10 feet long, lying at the extremity of a small spur known as *Sarpaṭai* about a mile to the east of the village and bearing rough scattered graffiti. They generally consist only of parallel strokes, crosses and the like, but here and there resemble carelessly formed Kharoshṭhī character—or the 'unknown' characters of those forged inscriptions which Abdul Hanān, an agent employed by Colonel Deane in the early years after the Chitrāl campaign to look for antiques, produced in numbers after the supply of genuine epigraphic remains to take impressions from had given out.[1] It was in fact remembered locally that pieces with such scratchings had at one time been cut from the surface of the rock and taken to the Malakand. This distinctly suggests that Abdul Hanān or some of his acolytes had been at work here.

Hill fastness above Uḍegrām.—But what prolonged my stay at Uḍegrām and made it fruitful was the unexpected discovery of a large and obviously very ancient mountain fastness on the rugged hill range that rises above Uḍegrām and the neighbouring villages on the eastern side of the valley. A peculiar hill formation which the sketch plan, Pl. 6, together with the photographs in Figs. 15, 19, 23, 26, 27, 29, 31, 33, will help to illustrate, had here provided a natural stronghold in times when there were no fire-arms to hamper defence in positions completely commanding their approaches. When seen from below near Uḍegrām village, the site known to the local Pathāns as 'Rāja Girā's Castle,' curiously resembled a huge ribbed scallop-shell turned with its broad edge upwards and its narrow mouth resting on gently sloping ground. Even without the fear of stones or other missiles from above it was a difficult site to explore. Much stiff climbing had to be done along precipitous rock faces and along lines of walls that were carried in places over almost impossible slopes before even a rough survey of the defences could be completed in the course of two arduous but very instructive and enjoyable days.

Immediately to the south-east of the village there opens the mouth of a small side valley descending from a very steep hill range that rises, as the sketch plan shows, to a height of nearly 2,000 feet above Uḍegrām. Passing up an alluvial fan from the village one enters an amphitheatre formed by rocky spurs converging from the crest of the range into the well-wooded narrow bottom of the valley. Where this serrated crest, nowhere more than about twenty yards wide on its top and in places almost a knife-edge, overlooks the fertile wide valley of Saidu eastward, nature for hundreds of yards has provided absolutely impregnable defences; for the crest falls away on that side in sheer rock walls and in places forms cornices actually overhanging them from above (Fig. 23). Where a bare narrow ridge on that side might bring assailants within reach of a stretch of rock wall that could be attacked by bold climbers with some chance of success, a massive bastion with buttressed walls has been built out over projecting cliffs to frustrate the attempt. But even while keeping to the

[1] Regarding this clever rogue and his useful work at the start, see below pp. 59, 100.

line of the crest itself I found progress distinctly difficult over certain stretches of this narrow and slippery ground. Yet even here remains of the ancient wall could be traced, strengthened at a point by a massive square tower.

Fortified hill crest.—At its northern end the fortified portion of the crest was specially protected by a strong redoubt known to the people of Uḍegrām as the *Takht* (Fig. 31). It was meant to ward off any risk of enfilading attack from the line of bare rocks continuing the crest in that direction. Thence the ancient wall runs for close on 800 yards along the crest. The amount of labour involved in its construction at this height and in that of the walls which descend along the precipitous rib-like spurs below must have been great, out of all proportion to the structural remains that have survived the effects of time and of insecure foundations on such difficult slopes. Where the wall at its southern end turns and leaves the crest it overlooks a narrow gully through which, about a thousand feet below, a steep foot-path passes leading from Uḍegrām into the valley of Saidu.

Thence the wall turns to the north-west and keeping to the top of a precipitous rocky spur descends some eight hundred feet to a small gently sloping plateau (Fig. 19). Defended by massive buttressed walls, this plateau projects like a bastion and guards what was the most exposed point of the whole fortified area (Pl. 6). The walls here still stand to a height of 22 feet. From here the circumvallation sweeps in an arc round the hollow to the east. It could be followed practically unbroken for about 210 yards to where a group of much decayed dwellings marks the lowest of the occupied terraces to the south. The wall is then carried down very steeply for some two hundred and fifty feet, here and there over veritable crags. Owing to the proclivity of the slope it has disappeared here altogether for short distances, though evident care had been taken to choose the surest alignment. Finally beyond a small corner bastion the wall runs in fair preservation north-eastward until it strikes a dry torrent bed, narrow and rock-lined, down which the main drainage of the circumvallated area finds its way to the valley.

Spring within fortified line.—A little above the line of the wall a fine perennial spring gushes here from among the big boulders that fill the bottom of the bed. It was the existence of this spring, the only source of water within the whole protected area, that rendered it capable of being used as a safe place of refuge. The importance attached to the spring is strikingly demonstrated by the special care taken to strengthen the defences intended to guard it. The walls on either side run in double lines down to the gully that holds this precious water. In the upper wall to the west of the gorge are found two vaulted recesses which look as if meant to shelter guards. On the opposite side the wall runs up steeply to the gorge of a bold outwork (Fig. 26), triangular in plan, which was evidently meant to defend approach from this gully. We found flowers blossoming in sheltered rock recesses by the spring and an old willow tree which the cool humid shade of the gully had allowed to grow up here. They formed a pleasant contrast with the grim rocks and crumbling fortifications above.

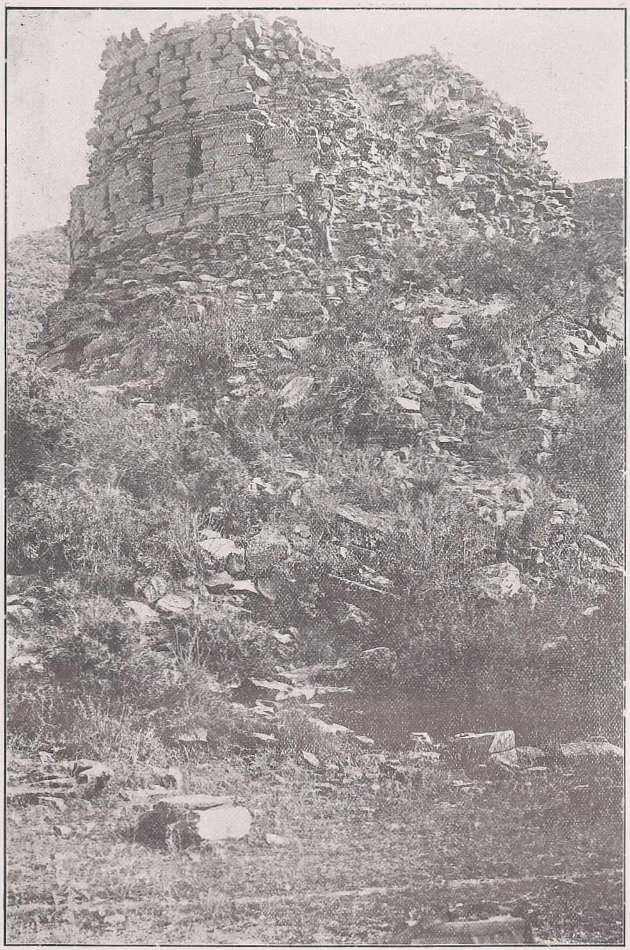

FIG. 28. REMAINS OF RUINED STŪPA ABOVE JURJURAI, JANBIL VALLEY.

FIG 29. RUINED FORTIFICATIONS ON NORTH-EASTERN SPUR OF RĀJA GIRĀ'S CASTLE, SEEN FROM SPRING.

Ancient walls ascending spur.—From the gorge of the outwork just referred to the wall runs up on an easterly spur to the northern end of the crest from which our survey above had started (Fig. 29). Though this spur is everywhere very steep, considerable stretches of this wall line have survived here in remarkable preservation (Fig. 27). In most places it is 7 feet thick and often strengthened by massive semi-circular buttresses. The steep slope of slippery rock outside this portion of the circumvallation must have greatly facilitated defence. Within the wall, too, the slope is so steep that only at a few points was there room for quarters occupying narrow terraces alongside of it. All these, like the far more numerous remains of small dwellings similarly situated above the spring and to the west of it, were found in far advanced decay. Yet their masonry had been solid enough, consisting as in the defences of carefully packed layers of stone set in hard plaster. The condition in which all the ruined houses were found, as compared with the remains of Buddhist monastic quarters and fortified dwellings seen elsewhere in Swāt, was clear evidence of their great antiquity.

Remains of habitations.—Communication over the narrow ledges or ladder-like rock paths leading from terrace to terrace must have at all times been difficult, and the task for the women who probably had to do most the water-carrying from the spring below very troublesome. The care with which all bits of ground capable of affording room for small structures had been utilized, together with the plentiful pottery fragments found over such ground and also near the walls, clearly pointed to 'Rāja Girā's fortress' having sheltered at times a fairly large population. Of the pottery debris I may note here that most of it consists of plain ware showing fairly well levigated clay. What decorated pieces were picked up (see Pl. I) all show merely simple ornamentation with narrow ridges and small bosses in relievo or sunk circles, vandykes, hachures, etc., incised or stamped, such as is common also at Bīr-kōṭ and other sites occupied during Buddhist times. The designs in black of the rare painted potsherds found are of the simplest kind as met with all through historical times. Glazed or regularly 'ribbed' ware characteristic of the period immediately preceding the Muhammadan conquest is completely absent.

In view of the extreme steepness of the slopes over which the remains of ruined dwellings within the walled area are scattered and the consequent inconvenience of approach and communication between them it is hard to believe that these quarters were regularly occupied except at times of danger. On the other hand the construction of massive defences on these difficult slopes must have implied such exceptionally great efforts that it is not likely to have been undertaken except for the purpose of assuring a safe retreat for the inhabitants of an important locality. Evidence of the latter's existence outside the walls is plentifully to be found both in the little valley immediately below and on the alluvial fan at its mouth. Low crumbling walls of ancient structures can be traced amidst the thick growth of scrub and thorny jungle in the gradually widening glen through which the drainage from the interior of the walled area descends in a little stream.

Ruins below fortified hillside.—Remains of larger size attract here attention at two points. One to the west of the streamlet is an enclosure measuring inside 74 by 64 feet and occupying a carefully levelled terrace. Judging from the fact that the interior is quite clear of debris it is probable that the area enclosed by the massive walls which still stand to some height was meant to stable animals in. I noted that the wall on the sides of the entrance which faces east is rounded off as if to facilitate the going in and out of large beasts. The men of our local escort talked of the place as the '*tawēla* of Rāja Girā.'

About 200 yards further down, close above the right bank of the deep-cut bed of the streamlet, a conspicuous rocky mound measuring on its flat top some 84 by 60 feet bears badly broken walls of a large structure; its character is no longer recognizable. Remains of ancient structures are particularly numerous also on the lower portion of the spur that further up bears the south-western flanking line of wall. Here a succession of walled up terraces, now all thickly overgrown by thorny Palōsa trees but once occupied by houses, orchards or gardens, afforded the easiest approach to the fortified area. This explains why the small plateau on which that flanking wall ends had been occupied by the particularly massive bastion already mentioned above.

Muhammadan tradition about site.—Where the valley widens and opens out towards Uḍegrām village (Fig. 15) it afforded ample room for a populous place. It is now covered with extensive Muhammadan burial grounds and sacred groves belonging to the Ziārat that is here venerated as the resting place of holy Pīr Khushḥāl Bāba. Among small objects shown to me as having been found here, there were two fragments of Graeco-Buddhist relievos (Pl. I), one representing a winged angel-like figure which may have supported a cornice; also a stone seal inscribed with the Buddhist formula and some Kushān copper coins. All these pointed clearly to the early occupation of this ground. But owing to its sacred character systematic search would have been difficult, even if time had been available for any excavation. Fertile as the soil near and below the Ziārat is, and easily irrigated from a lively little stream, it may not be cultivated nor even be planted with fruit trees.

Pious tradition recognizes in the saintly hero and martyr, Pīr Khushḥāl Bāba, the leader of the Faithful in the army of Maḥmūd of Ghazna who after a difficult siege protracted for years took 'Rāja Girā's fortress' from the last infidel king of Swāt. Maḥmūd of Ghazna, the great invader from the Afghān highlands, who first opened the way into the plains of Northern India for conquering Islām, is the oldest historical figure to which popular legend on the North-West Frontier reaches back. The tradition locating one of the exploits on his many expeditions at 'King Girā's Castle' would therefore suffice to prove the high antiquity that local popular belief ascribes to the site.

Arrian on siege of Ōra.—But there are indications to be found in the classical accounts regarding the direction of Alexander's operations beyond Bazira which if rightly interpreted would justify us to assume high antiquity

for that remarkable stronghold on other and weightier grounds. Combined with what I shall presently set forth as regards the name of *Uḍegrām* those indications have suggested to me the question whether we should not look here for the probable location of Ōra. We have met with the mention of this place already in the account quoted above from Arrian's *Anabasis,* IV. xxvii. This tells us that Alexander after the capture of Massaga dispatched Koinos to Bazira and further sent Attalos, Alketas, and Demetrios, the cavalry leader, to Ōra, another town, with instructions to invest the town until he himself arrived. A sally made from the latter place against the troops under Alketas was repulsed by the Macedonians without difficulty, and the inhabitants driven back within their walls. Alexander himself learning of Koinos' difficulties before Bazira first set out for this place, but subsequently "having come to know that some of the neighbouring barbarians, prompted to this by Abisares, were preparing by stealth to enter Ōra," was induced to proceed straight to Ōra and to order Koinos to join him with a portion of his troops, the other being left to mask Bazira.

Arrian's further brief mention of Ōra furnishes no direct indication of its position. It is confined to the bare statement that "Alexander did not find the siege of Ōra difficult, for he took the town on the first assault against its walls and secured the elephants left behind there." Nor does Curtius's account help us[2]. He mentions, indeed, a place *Nora,* to which Alexander dispatched a force under Polysperchon after the capture of Mazaga, and this has been generally assumed to be the same as Arrian's Ōra. But all that we are told about it is that Polysperchon "defeated the undisciplined multitude which he encountered and pursuing them within their fortifications compelled them to surrender the place."

Position of Ōra.—Since the textual records fail to supply us with direct topographical indications we must feel all the more grateful for the guidance afforded by the confident location of Bazira at Bīr-kōṭ. That Ōra lay higher up the Swāt valley than Bazira may safely be concluded from two observations. One is the reference made to Abisares. We know from his very name, the Sanskrit Abhisāra[3], and from other Greek notices in connexion with Alexander's further campaign, that this chief ruled over the territory on the left bank of the Indus where it faces the upper portion of the main Swāt valley. If Ōra was to be reinforced or relieved by tribesmen acting under Abisares' instructions or impulse, it was obviously because its position farther up the main valley allowed of access to it from that side without interference by the Macedonians who had already secured Lower Swāt. We are led to the same conclusion by the fact that Alexander, as we have seen, ordered Koinos, who stood before Bazira, to join him for the attack upon Ōra with the main portion of his force, while taking care to have Bazira masked by the remainder. The

[2] See Curtius, *Historiae Alexandri,* VIII. ix.

[3] Regarding the later application of this local designation, cf. my note on *Rājataraṅgiṇī,* i. 180.

position occupied by Bīr-kōṭ on the main line of communication leading up the Swāt valley explains the necessity of this measure and at the same time clearly shows that Ōra lay beyond it. The importance of Ōra is shown by the fact that Alexander himself felt prompted to secure it quickly, in view of the reported move to reinforce the defenders.

Taking into account the general geographical features, we are led to look for Ōra higher up the main Swāt valley and at some point which the presence of ancient remains would definitely indicate as having been occupied by a fortified town of some importance. Now Upper Swāt above Bīr-kōṭ at the present day shows a number of large places which might be called towns, such as Mingaora, Manglawar, and Chārbāgh, all on the left bank of the river. But at none of these, apart from Uḍegrām, did I succeed in tracing definite evidence of ancient fortification. Nor did I hear of such remains at any of the large villages to be found near the right bank. This quasi-negative fact would by itself suffice to draw our attention to the ruined stronghold above Uḍegrām as the probable position of Ōra. But more reliance, I believe, can be placed on the evidence which is supplied by the name *Uḍegrām* itself.

Name of Uḍegrām.—As regards this name it must be explained in the first place that it is certainly a compound of which the second part is the term *grām* (Sanskrit *grāma*), 'village.' This is well known to most Dardic languages and very common in old local names of Swāt, as a reference to the map shows, being attached to the special designation just as the work *kōṭ*, 'fort, castle,' is in other names. The first part *Uḍe-* (also heard as *Uḍi-*) is pronounced with that distinctly cerebral media *ḍ* which to European ears always sounds like a cerebral *r*, and often undergoes that change to *r* also in Modern Indo-Aryan as well as in Dardic languages[4]. The temptation is great to recognize in Arrian's Ὦρα the Greek rendering of an earlier form of this name *Uḍe-*, and to derive the latter itself from that ancient name of Swāt which in its varying Sanskrit forms of *Uḍḍiyāna*, *Oḍḍiyāna*, has been recovered by Professor F. W. Thomas and M. Sylvain Lévi's critical scholarship from a number of Buddhist texts.[5] The simplification of the double consonant *ḍḍ*, the complementary lengthening of the preceding vowel *ū* (*ō*), which would explain the long initial vowel in Ὦρα, and the subsequent shortening of this vowel in modern *Uḍe-* (when becoming an antepenultimate in the compound Uḍegrām), all these phonetic changes assumed in the history of the name can be fully accounted for by well-known rules affecting the transition of Sanskrit

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[4] Cf. Grierson, *loc. cit.*, *Z. D. M. G.*, 1896, p. 5; 'Piśāca Languages', p. 104. For an example of *ḍ* being rendered by Greek *r*, cf. Ptolemy's name *Larikē* for Gujrāt, reproducing a Prakrit derivative *Lāḍikā* of the Sanskrit name *Lāta*; also Weber, 'Greek pronunciation of Hindu words', *Indian Antiquary*, 2, p. 150.

[5] See S. Lévi, 'Le catalogue géographique des Yakṣa dans la Mahāmāyūrī', *Journal Asiatique*, 1915, jan.-févr., pp. 105 sqq. There, too, it has been convincingly shown that the form *Udyāna* ('the Garden'), commonly accepted by European scholars as the Sanskrit name of Swāt, is based upon a 'learned popular etymology' which a gloss on the Chinese notice of Swāt in Hsüan-tsang's *Hsi-yü-chi* first records.

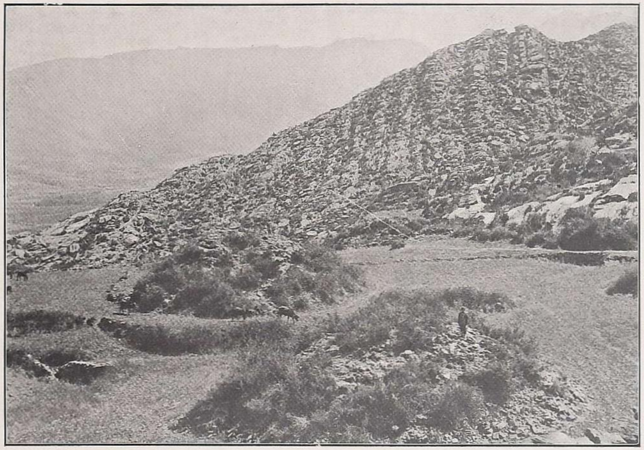

Fig. 30. Ruined mounds marking Stūpas, Sharārai.

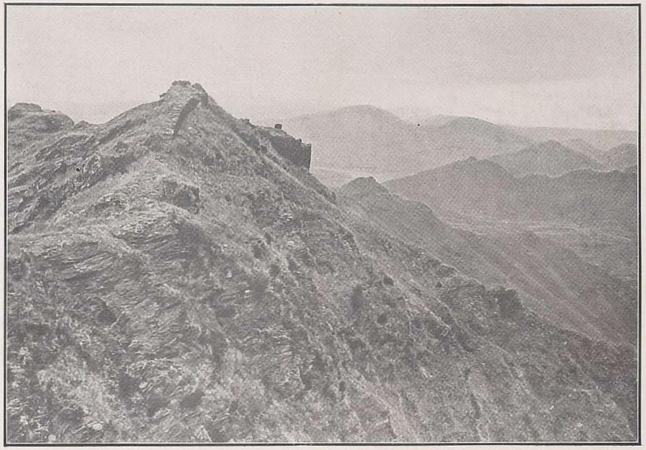

Fig. 31. Fortified hill crest, Rāja Girā's Castle, Uḍegrām.

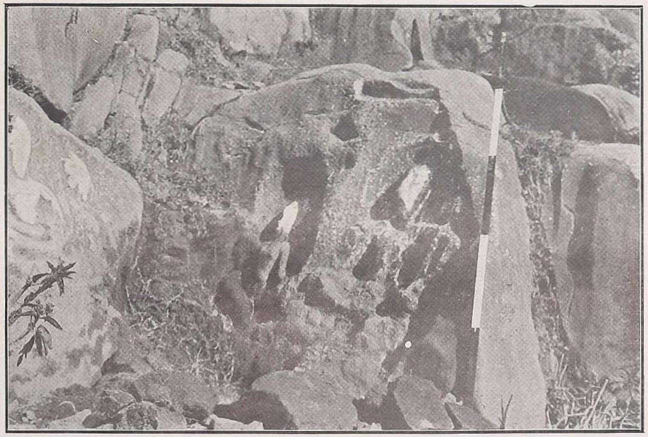

Fig. 32. Rock-carved images of Bodhisattvas near kukṛai.

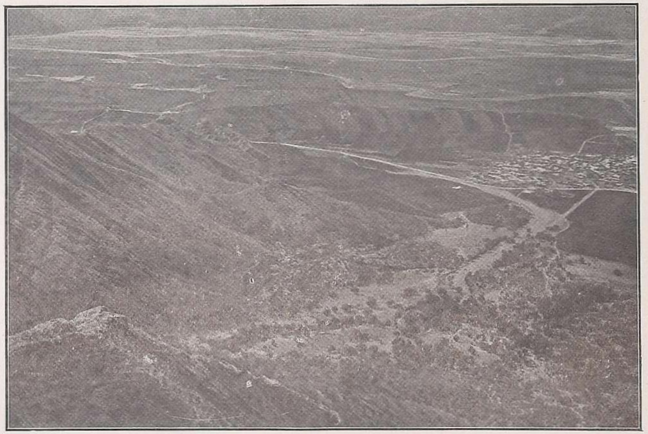

Fig. 33. View down towards Uḍegrām and Swāt river from crest of Rāja Girā's Castle.

words into Prakrit and thence into modern Indo-Aryan forms.[6] Nevertheless, it will be well to bear in mind that the nexus of names here indicated must remain conjectural until epigraphical or other evidence helps to establish it.

Fall of Ōra.—Arrian's account of the impression produced among the Assakēnoi by the fall of Ōra is a proof of the importance attaching to the place, and may perhaps also reflect the reliance that had previously been placed upon its natural strength. We have already seen that the people of Bazira on hearing of the fall of Ōra abandoned their town. But in addition we learn that "thus the other barbarians, too, did; leaving their towns, they all fled to the rock in that country called Aornos." To Arrian's description of that mighty mass of rock and to his account how the fame of its impregnability fired Alexander with the ardent desire to capture it, I shall recur when relating my subsequent search for it by the banks of the Indus.[7]

In the Swāt valley itself, it is clear that the capture of Ōra had brought Alexander's operations to a triumphant conclusion; for Arrian's narrative shows us that, after establishing Macedonian posts at Ōra and Massaga as well as at Bazira to guard the country, the conqueror turned south to the Peshawar valley. There he was to establish his junction with the major division of the army that had preceded him down the Kābul river, and then to carry his campaign farther east to the Indus.

Before leaving the subject of Uḍegrām and the ancient stronghold above it mention must be made of a mound, known as *Uḍegrām-ḍhērai*, which was examined by me about a quarter of a mile to the north of the village. It rises amidst rice fields by the side of a large canal to a height of about 15 feet and measures some 70 yards by 50. It appeared to be the remnant of an extensive area that had once been occupied by habitations and is now probably buried under alluvial deposits or turned into terraced rice fields. Finds of ancient copper coins were said to be frequent here.

CHAPTER III.—RUINS OF CENTRAL AND UPPER SWĀT

SECTION i.—STŪPAS AND ROCK SCULPTURES ABOUT SAIDU

On March 23rd I started from Uḍegrām for Saidu, the hereditary seat of the Miāngul, in order to pay without further delay the visit due to the remarkable ruler whose rise had given me access to this interesting and hitherto forbidden land. Passing the large villages of Bālogrām, Kambar and Khatalai we arrived after eight miles at Mingaora. This little town, the largest place

[6] Cf. Grierson, *loc. cit.*, *Z. D. M. G.*, 1895, p. 41; 1896, pp. 21 sqq. Closely corresponding rules can be shown to have affected also the phonetic development of Dardic languages, especially of that Sanskritized Dardic tongue which, from the evidence of the present Tōrwālī and Maiyā in the Swāt and Indus Kohistān, must be assumed to have been spoken in Swāt before the Pathān conquest.

[7] Cf. below pp. 66 sqq.

in Upper Swāt, owes its importance, just as Bīr-kōṭ does, to a situation particularly favoured by nature. Mingaora lies where two large and fertile side valleys descending from the watershed towards Bunēr meet and debouch upon the Swāt river. The latter within a mile or so from Mingaora makes its great bend from a southerly to a westerly course at the foot of an outlier of the rugged Shamēlai spur, and on both banks of the river the main valley here forms open bays with rich arable land. The town is thus of easy access from all directions. Nowadays in addition it enjoys the advantage of being within about two and half miles from Saidu, the present political centre of Swāt. With its crowded Bāzār visited not only from all parts of the 'Bādshāh's' dominion but also from the valleys of the Swāt and Indus Kohistān, Mingaora seems destined to rival Thāna as a commercial emporium.

Town of Mingaora.—The town itself shows no ancient structural remains above the ground. But I was struck by the quantity of good woodcarving displayed on the doors and in the interior of most of its plentiful shops. Among crowded designs of arabesque style it was easy to recognize graceful acanthus scrolls and other floral motifs common in Græco-Buddhist sculpture. Most of the work is, of course, clearly derived from Persian decorative art. But there was welcome proof, too, that the influence of Hellenistic art to which the relievos from the Buddhist ruins of Swāt like those from Gandhāra so strongly bear witness, had left its traces in local craftsmanship. They proved to have still more distinctly survived in the domestic architecture of secluded alpine Tōrwāl.[1]

Ruined Stūpas near Mingaora.—That Mingaora must have been a place of importance also in Buddhist times is proved by the considerable number of ruined Stūpas which are to be found in its vicinity. As was to be expected, all those from which building materials could conveniently be brought to Mingaora or to Saidu showed sad evidence of destructive quarrying. Among those I was able to examine that day on my way to Saidu, the Stūpa standing on rising ground known as *Shāh Hussain-patai*, about a mile to the east of the town, was the nearest and also the most decayed. The dome had completely gone, and no exact measurement was possible even of what was left of the base. It appeared to have measured about 46 feet square, and the mound to which it has been reduced rises about 15 feet above the level of the sloping ground close by. About half a mile to the south-east there stands by the side of the track which leads from Mingaora across the rugged height of the Shamēlai-kandao towards Manglawar the Stūpa ruin known as the *Rangmālā-gumbat*. It has been completely stripped of its facing stones and much of the masonry core, too, has been removed. But the mound marking the dome still measures about 25 feet in diameter on the top and rises to about the same height above the mass of debris to which the bases have been reduced. The lowest of these certainly measured once some 50 feet or more.

From there, I descended past Ḥājī Bāba's Ziārat to the stream which comes from the Khalēl pass and drains the Janbil valley, and visited the site known as

[1] See below, p. 64.

Butkara not far from its left bank. There amidst low mounds surrounded by irrigated fields it is possible to recognize the position of a completely wrecked Stūpa. The mound measures about 24 feet across on the top ; it shows everywhere the effects of quarrying operations continued down to quite recent times. Such were actually still in progress at the Stūpa of *Kānchai-kanda* situated above a small gully which descends from the spur to the east, about halfway between Saidu and the mouth of the Janbil valley. Here, too, all the facing masonry had been removed, but the dome portion was still recognizable with a diameter of some 36 feet and a height of over 30 feet.

Halt at Saidu.—During the three days while my camp stood at Saidu I was able to obtain interesting impressions described elsewhere of the remarkable personality of the ruler and of his régime. It has secured peace to Swāt and is steadily preparing the way for a return of such prosperity as its inhabitants have not known for many centuries. But long rides made it possible also to acquaint myself with numerous remains of antiquity in the picturesque and well-cultivated valleys which lead up from Mingaora and Saidu to the several passes crossing the range towards Bunēr. The one which winds to the south of Saidu passes after a couple of miles just below the frowning heights crowned by 'Rāja Girā's Castle.' I was thus able to appreciate still better the wholly impregnable face here presented by the fortifications at its top.

Stūpa of Shināsī-gumbat.—Above the large village of Guligrām the valley makes a sharp bend, and about a mile further up not far from the village of Batēra there rises the fairly well preserved Stūpa known as *Shināsī-gumbat* (Fig. 34). It rises in an open nook to the south of, and well above, the bottom of the valley. Its lowest base, 75 feet square, was approached by a wide flight of steps from the north, as seen in the sketch plan, Pl. 7. Above this base there appear to have been two circular bases; but owing to far advanced decay the position and height of only the upper one could be definitely ascertained. Slightly projecting pilasters, marked in most cases only by the matrices left in the facing masonry, decorated both square and circular bases. A cornice separated the uppermost base from the drum above it. Between this and the dome intervened a shallow recess, as seen in the photograph. The dome is distinctly hemispherical in shape and in a fair state of preservation except on the north where a cutting had been made ; it measures about 44 feet in diameter. The facing masonry is of the same type as at the Stūpas of Amlūk-dara and Shankardār but less carefully done. A small circular mound, only 7 feet high, which is found on the cultivated terrace to the SW. of the Stūpa probably marks the position of a little Stūpa. Low broken walls on the top of a small rocky ridge about 180 yards to the west may mark remains of a monastic dwelling.

Rock-carvings near Kukṛai.—Less than a mile above the ruined Stūpa and on the same side of the valley lies the village of *Kukṛai* at the mouth of a picturesque side valley. A magnificent spring issuing in a fine grove of Chinārs assures ample irrigation to the terraced fields below. About 50 feet above

it by the side of the path which leads up the side valley there are found two groups of rock-carved relievos. In the lower one (Fig. 32) two boulders face each other at right angles. On the one to the right is seen a seated Bodhisattva holding in the left hand a lotus stem, while the right arm hangs down apparently in the *vara-mudrā* pose; by its side is a smaller seated female figure with both arms down. The whole carving is 3 feet long and 2 feet high. The rock to the left shows two badly injured smaller figures, both seated, with details no longer recognizable. In the upper group of relievos is seen a seated Bodhisattva in the same pose as the one just described and 2′ 4″ high. On either side there is a much effaced standing figure and to the left again another seated Bodhisattva of smaller size in the same pose. The whole group measures 5′ 5″ in length.

On the opposite side of the main valley and not far above Kukṛai the mule-path leading up the valley passes below a rock bearing two much injured small relievos. Heaps of stones lying below them attest the iconoclast custom here practised by zealous wayfarers. No details can be made out beyond that one figure represents a seated Bodhisattva with the left arm hanging below the knee and the other a seated Buddha or Bodhisattva. About a mile above Kukṛai there opens on the east the broad and fertile plateau of Islām-pur, and after another mile or so the valley bifurcates, one branch leading south-east to the Jowarai pass and the other due south to the Jaosu pass. Following the route to the latter and passing below the broad spur which bears the village of Spālbāndai, I was shown a much damaged relievo on a boulder which has been moved from its original position and now shows the carved figure sideways. It is a seated Bodhisattva, like the previously mentioned figures of the same type, apparently representing Avalokiteśvara, with the left leg hanging down and the left hand holding a lotus stem. The figure is 3′ 8″ high and 1′ 10″ across the knees. About 8 yards higher up there is another rock-carved image of the same size but only 1′ 7″ in height.

Remains at Miāna.—Ascending by the route which leads to the Jaosu pass we reached the Bādshāh's newly built fort of Miāna intended to guard the approach from the Bunēr side. Where a small flat-topped spur a little higher up bears Gujar dwellings I was shown the remains of two ruined structures obviously dating from Buddhist times. The one to the west (for a sketch plan, see Pl. 1) comprises a row of four rooms and may have been a small monastic dwelling place. Of the other to the east there remains only a large platform about 10 feet high showing massive masonry of the Gandhāra type and measuring 58 feet by 21. It may have once borne a small Vihāra. Among the plentiful potsherds of ancient look lying around the ruin there was picked up the fragment of a terracotta model Stūpa (see Pl. I) showing stairs on the four sides of the base arranged in the fashion first noted by me at the Rawak Stūpa near Khotan.[2]

[2] See *Ancient Khotan*, i. pp. 484 sqq.; ii. Pl. XL.

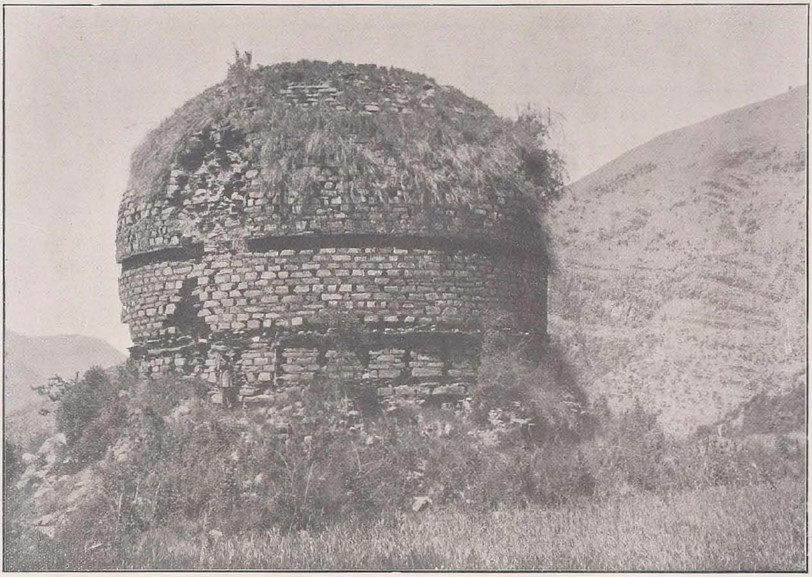

FIG. 34. RUINED STŪPA OF SHINĀSĪ NEAR BATĒRA, SEEN FROM SOUTH-WEST.

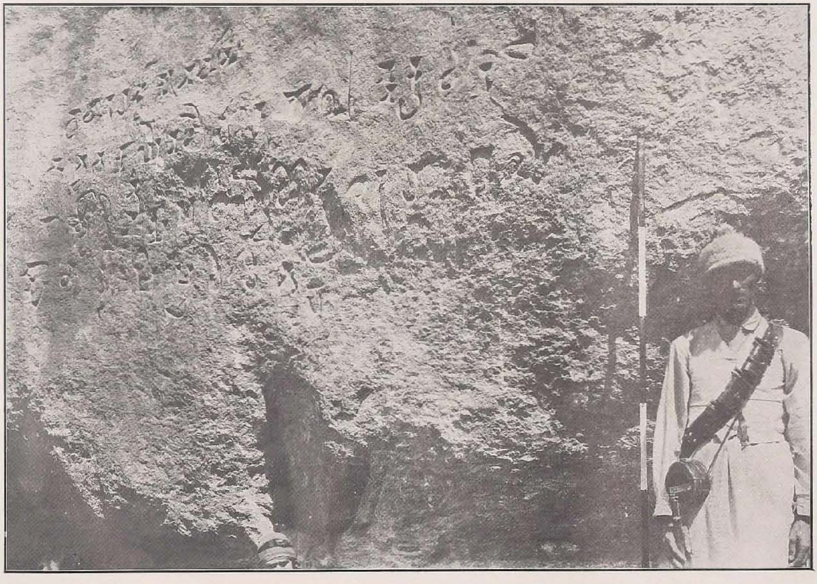

FIG. 35. BUDDHIST INSCRIPTION ON ROCK OF OBO-GHAṬ, NEAR SHAKHŌRAI.

I may note here that the most direct and convenient route from Mingaora and the adjacent central portion of Upper Swāt to the sacred top of Mount Ilam leads up past Miāna to the saddle of Sarbāb, now occupied by the Bādshāh's little 'hill station' and thence up the spur which divides the Jaosu valley from Amlūk-dara. That the pilgrimage to Mount Ilam is of a very ancient origin is proved by the Hsüan-tsang's description of Mount *Hi-lo.*[3] The pious traveller himself appears, however, to have approached the sacred mountain from the Bunēr side.

Remains in Baringan valley.—In order to visit the ruins reported in the Janbil valley I proceeded first up the small valley of Baringan by which lies the direct route from Saidu to Islāmpur and the Jowarai pass. About half a mile to the south of Saidu quite a series of small rock carvings is to be seen on boulders close above the track. It was no surprise to find that all these relievo images, close to a spot so much frequented by pious visitors as Saidu is since the great Ākhund lived and died there, have been badly disfigured by stones thrown at them by passers-by. The first group shows two seated Bodhisattvas with one leg hanging down and a lotus stem held in the left hand. Between them is seen the small representation of a Stūpa in relievo. The whole measures only 3 feet in length. A little farther up there are seen four more Bodhisattvas in the same pose and in different sizes, all small, adapted to the available space. In a third group are found three more figures of the same kind and above them one or two little relievo models of Stūpas.

At a point about 1½ miles from Saidu I noticed an ancient wall, 4 feet thick, which descends into the Baringan valley from the heights on the west. It was said to be traceable right across to the hillside above Bālegrām, a short distance west of Saidu. The only apparent purpose of such a defensive line could have been to close approach from the side of the Jowarai pass. Popular belief connects it with 'Rāja Girā's Castle.' Remains of ruined walls of dwellings were visible westwards to a height of about 100 feet above the bottom of the defile here formed by the Baringan Nullah.

Stūpas of Sharārai site.—Here we left this Nullah and ascended over steep rocky slopes to a gully on the crest of the spur towards the Janbil valley. Descending from here some 600 feet we reached a small plateau situated between two torrent beds and facing the village of Pāṇ in the valley below. It bears a Buddhist site of obvious importance marked by not less than six Stūpas, and known as Sharārai from a spring close to one of these. The Stūpas, as the sketch plan (Pl. 7) shows, are scattered over an area measuring about 200 yards from east to west and some 170 yards across; they have all been dug into and are badly destroyed, as seen in Fig. 30. Only two of them, iv and v, have preserved at least some remains of the facing masonry of their domes. It is only in the case of the second that the diameter of the dome could be roughly determined, it being about 33 feet and the extant height over 22 feet. The plan shows the approximate diameter of the mounds left;

[3] See below, p. 102.

these, no doubt, comprise also portions of the bases. The complete ruin of the Stūpas clearly proves that quarrying operations had been carried on here for the benefit, not perhaps of Mingaora but of the villages nearer by in the valley. Below the mound formed by Stūpa ii there lies a circular stone, 8 feet in diameter, evidently one of the Chhattras which crowned the Stūpa. To the south of these ruins a large platform, partly artificial partly resting on walls, stands to a height of about 20 feet. It appeared to have been occupied by a completely destroyed shrine. Beyond the plateau which carries these ruins there rises on the north a small rocky ridge extending about 140 feet in length from east to west. It is covered with debris from walls of decayed quarters; plentiful potsherds of ancient type lie among them.

About 150 feet lower down on the hillside the path leading to the Gujar hamlet of Lōe-bānde passes a large boulder bearing a group of rock carvings about 8 feet long (Fig. 38). All figures have been badly damaged. In the middle is a seated Buddha flanked by two divine figures, apparently standing. On the right are two Bodhisattvas, partly hidden in the ground; on the left a small seated Bodhisattva, carrying a lotus stem in his left and evidently representing Avalokiteśvara, is flanked by a smaller Bodhisattva on either side.

Stūpa of Jurjurai.—Skirting the hillside for about a mile south-eastwards to Lōe-bānde I observed a badly destroyed Stūpa in a gully above the hamlet. The size of the mound resembled that of the Sharārai Stūpa v. Continuing in the same direction for another half mile the large ruined Stūpa of Jurjurai (Fig. 28) was reached just opposite to the village of Dāngrām. It, too, had suffered badly by digging for treasure and by quarrying, but preserved the facing masonry of large slabs at least on portions of dome and bases. Of the latter there were, as the sketch plan (Pl. 7) shows, three, the lowest measuring 53 feet square. This as well as the two upper circular bases were decorated with pilasters about one foot wide; these, however, in most places are now marked only by the 'matrices' they have left at their back. The dome broken on the top appears to have measured about 33 feet in diameter. On the slope to the north of the Stūpa there are found two fragments from a large rock-carved relievo showing a seated Bodhisattva.[4]

Stūpa remains near Pāṇ.—Finally descending the wide well cultivated valley for about 1½ miles by the road which comes from the Khalēl pass, there was reached a cluster of five badly decayed Stūpas. They lie close together in the midst of fields and are screened from the village of Pāṇ a little lower down by a low spur. All have been reduced more or less to the condition of shapeless mounds. But in the case of the one marked i in the sketch plan (Pl. 8) the lowest base, about 55 by 53 feet square with the stairs leading up to it, was still traceable, all that was left rising to about 30 feet above the level of the fields. The two southernmost mounds also seemed to mark the position of Stūpas of a similar size. The destruction which had overtaken these remains of what evidently was a Buddhist site of importance is explained by its vicinity to the town of Mingaora.

[4] For specimens (Jur.) of decorated potsherds, also a bronze spearhead, see Pl. I.

SECTION ii.—BUDDHIST REMAINS OF MANGLAWAR AND CHĀRBĀGH

On March 27th I was able to leave Saidu where my stay had been made both interesting and instructive by repeated interviews with the Ruler of Swāt, for the survey of what ancient remains might be traced in the upper portion of the main valley. My first objective was the large village of Manglawar, situated some eight miles above Mingaora at the point where a considerable side valley descending from the watershed range to the east debouches. The early season still permitted the use of the winter route up the main valley; it leads in the bed of the Swāt river round the foot of the rugged Shamēlai spur and thus avoids the troublesome crossing of the latter. But the fording of the branching beds of the river was made already difficult by the rise of its volume which the spring melting of the snows higher up was causing. The path which keeps to the precipitous cliffs lining here the left bank for more than a mile, is carried in places over narrow wooden galleries and is altogether impracticable for transport animals even if unladen.

After regaining the rocky foot of the spur and proceeding along it for another mile we passed the point where a last offshoot of the hill known as *Sangōṭaparkha* drops steeply into the river. Here the position of a ruined watch-station is marked by ancient pottery debris and traces of wall foundations. They occupy the flat top of a commanding knoll to which broad steps hewn in the rock lead up from the path below. Beyond this knoll there stretches an open and well cultivated alluvial plain right up to Manglawar, some two and a half miles north-eastwards.

Position of Manglawar.—Manglawar is a large village of more than four hundred households. It occupies rising ground between the considerable stream which has its headwaters near the Kōtkai pass towards Ghōrband, and another which joins it here from the side of the Dwasare massif to the south-east. A much frequented route leads up the former stream to the Ghōrband valley beyond the watershed and thus connects Swāt with the hill tracts to the west of the Indus. The advantages offered by the position on this route and those derived from plentiful resources for irrigation may be held to account for the importance Manglawar evidently enjoyed in Buddhist times; for there can be no doubt about its site being identical with that of the town of *Mêng-ch'ieh-li* which Hsüan-tsang describes as one of the four or five strong places of Wu-chang-na or Swāt and as the seat chosen by most of its rulers.[1] It was sixteen or seventeen *li* in circuit and had a flourishing population.

Hsüan-tsang's Mêng-ch'ieh-li: Mangalapura.—Its location at Manglawar, first proposed by V. de Saint-Martin and accepted by General Cunningham and Sir Harold Deane,[2] is not subject to doubt. Hsüan-tsang's *Mêng-ch'ieh-li* represents as close a rendering as Chinese transcription would permit, of the first part of the Sanskrit **Mangalapura* of which the modern name *Manglawar*

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[1] See Julien, *Mémoires*, i. pp. 132 sqq.; Watters, *Yuan Chwang*, i. p. 227.

[2] Cf. V. de Saint-Martin's 'Mémoire analytique', in Julien, *Mémoires*, ii. pp. 314 sqq.; Cunningham, *Ancient Geography of India*, p. 82; Deane, 'Notes on Udyāna', *J. R. A. S.*, pp. 655 sqq.

is the direct phonetic derivative. Equally convincing proof of the identification is furnished by the bearings and distances from the royal capital which Hsüan-tsang's record indicates for the different sacred sites visited by him in Swāt and Bunēr. They are all in agreement with the location of *Mêng-ch'ieh-li* at Manglawar. This has been shown above as regards the position of King Uttarasena's Stūpa at Shankardār. It will prove further on to be the case also in respect of certain sacred spots mentioned by the pilgrim higher up in the Swāt valley.[3] As regards other sacred places in Wu-chang-na which the *Hsi-yü-chi* locates with reference to *Mêng-ch'ieh-li*, and which are at present capable of being identified with more or less certainty, it must suffice here to refer to the full review of them contained in *Serindia*.[4]

It deserves to be noted that Hsüan-tsang speaks of *Mêng-ch'ieh-li* only as the town which had *chiefly* been used as the seat of government.[5] This evidently implies that at the time of his visit, about A.D. 631, other places, too, were known to have served as capitals in former times. And in fact it would be difficult to claim for Manglawar quite such geographical and other advantages as central position, agriculturally rich environs, etc., assure to places like Mingaora, Uḍegrām, Thāna and some others. But account may, perhaps, be taken of the fact that Manglawar is nearest among large places to the route which gives direct access from Swāt to the hill territories on the Indus. Some importance may have attached to this fact in view of what Hsüan-tsang tells us of *Ta-li-lo, i.e.*, the present Darēl, one of those territories, having once been the seat of government of Wu-chang-na.[6] Considering the distance and the comparative smallness of Darēl it is scarcely possible to recognize in this statement more than a local tradition heard by the pilgrim that Swāt was at some earlier period ruled by chiefs whose ancestral home was Darēl.

Large Stūpa mound near Manglawar.—The ancient remains at and near Manglawar did not prove as numerous as previous reports had led me to expect, yet all the same were of interest. In the village itself there were to be seen in the houses plenty of large roughly dressed stone slabs which obviously had been taken from ruined structures; but of such no remains could be traced above the ground. There was, however, no chance of mistaking a Stūpa ruin of great size known as *Rāsho-ḍhērai* (the 'heaped mound') in the high conical mound which rises amidst level fields about half a mile to the ENE. of the village. The Stūpa had not only been completely stripped of its masonry facing but its superstructure had obviously served for centuries as a conveniently near quarry for those who continued to occupy the old town site. Only at the south foot of the mound was it possible to trace with some approach to clearness

[3] See above, p. 31; below, pp. 51 sq., 61.

[4] Cf. *Serindia*, i. pp. 15 sqq.

[5] See Watters, *Yuan Chwang*, i. p. 227.

[6] Cf. Julien, *Mémoires*, i. p. 149; Watters, *Yuan Chwang*, i. p. 239.

Incidentally I may mention here that the name of the largest place in Darēl, *Mankiāl* (see *Innermost Asia*, i. p. 23), is borne also by a village in Tōrwāl, the alpine portion of the main Swāt valley, opposite to Chōḍgrām. But the close relationship between the language of Tōrwāl and the Shiṇā spoken in Darēl, both Dardic languages (see Sir George Grierson's *Sketch of the Tōrwālī language*), may easily account for the same name being found in both localities.

what appeared to be the line of a square base about 240 feet long; but test measurements taken on the other sides seemed to confirm this. Everything higher up, including dome and upper bases, had been reduced to a shapeless conical mass of stones overgrown by scrub. The measured height of the mound is 63 feet, the diameter of the flat top 35 feet. These dimensions in conjunction with that of the still traceable lowest base suggest a Stūpa of very great size.

This observation and the position of the mound leave little doubt about its identity with the 'great Stūpa' which Hsüan-tsang mentions as being 4 or 5 *li* to the east of Mêng-ch'ieh-li and the scene of many miracles.[7] Here the Buddha in a previous birth as the 'Patiently-enduring Ṛshi' was believed to have been dismembered by the wicked king Kali.

On the hillside rising above the bed of the stream which passes to the north of the Stūpa, I was shown the relievo carving of a seated Bodhisattva probably representing Avalokiteśvara. It measures about 3 feet 4 inches in height and being on a steep rocky slope about a hundred feet above the stream is somewhat difficult of access. Descending to the bank of the stream and following it to a point about half a mile further up there is found at the foot of the steep cliffs a group of small relievo images carved on a rock. The whole measures 5 feet in length and shows on the left a seated Bodhisattva $1\frac{1}{2}$ feet high, carrying a lotus stem in the left hand, and to the right a seated Buddha between two small Bodhisattvas (?). At an angle to the left of this group there is carved another small Buddha.

Ruined dwellings on Maizere spur.—The steep spur which from this point runs up to the north, flanked by deep Nullahs on either side, is up to a height of some 300 feet from the stream bed covered with much decayed walls built in the Gandhāra fashion. The fairly flat top of the spur, known as *Maizere*, bears remains of ancient dwellings of the same type for a distance of about 135 yards from north to south. At its northern end a deep gully cuts it off from the continuation of the spur and thus assures protection. The middle of the little plateau rests on a massive supporting wall also showing careful masonry of the Gandhāra type. The plentiful pottery fragments on the top and slopes (for a specimen, Maiz., *see* Pl. I) all looked of ancient make, comprising numerous pieces decorated with stamped or incised patterns like those found at Uḍegrām and Bīr-kōṭ.

Buddhist rock inscriptions.—Remains of a more interesting character are to be seen on the hillside above the small village of Shakhōrai, itself situated to the south of the stream a little over two miles above Manglawar. There three large rock-carved Buddhist inscriptions were found. They proved identical with those which Professor Bühler had published from inked estampages supplied by Sir Harold (then Major) Deane in 1896.[8] Two of them are engraved on a large and conspicuous rock face which from a little spring issuing

[7] See Julien, *Mémoires*, i. p. 133, and Watters, *Yuan Chwang*, i. pp. 228 sq., where a mistranslation of Julien is rectified.

[8] See *Epigraphia Indica*, iv, 1896-97, pp. 133 sqq.

in a cool grotto underneath the overhanging rock is known as *Obo-ghaṭ*, the 'rock of the water.' The spot is reached by a steep ascent over boulders and through thorny thickets. Both inscriptions contain Sanskrit renderings of verses from the Dhammapada. The palæographic character of their Nāgarī letters, according to Professor Bühler's expert analysis, seems to date the inscriptions as from the early Kushān period. The lower one, engraved in bold and deeply incised characters, extends over a surface about 12 feet in length and is shown by Fig. 35. The upper inscription immediately above the grotto has suffered more by weathering.

The third inscription is engraved on a huge isolated rock, about 200 yards off to the north-east and some 100 feet lower down. The rock, about 50 feet long and 18 feet high, is supposed to hide a great treasure and accordingly bears the name of Khazāna-ghaṭ. Its inscription extends in three lines over a length of 8 feet 3 inches and contains a Sanskrit rendering of a famous verse attributed by Buddhist canonical texts to Indra at the time of Śākyamuni's death or to the Buddha himself. Its palæographic character points to approximately the same period. Though all three inscriptions unfortunately furnish us with no historically useful data, yet they give support to the conclusion that the neighbouring site of Mangalapura was of some importance already in the first few centuries of our era.

Colossal relievo of Buddha.—To the same early period may belong also the colossal relievo image of a seated Buddha (Fig. 37) carved into a high rock face of reddish colour which rises on the hillside to the south-west of Shakhōrai and about 300 feet above it. This fine image, owing to its position high above the narrow terrace at the foot of the rock face, has practically escaped injury except at the nose. But the same reason, added to the failing light at the time of my visit, made it difficult for me to secure an adequate photograph. The image, as measured by the eye, appeared to be about 13 feet high from the crown of the head to the top of the *pīṭha* below, and to be about 14 to 15 feet across the knees. It is visible from a great distance down the valley and is certainly the most impressive piece of sculpture to be seen in Swāt. Returning from there towards Manglawar by a path keeping well above the bottom of the valley I noticed debris of ancient pottery as well as of burnt bricks lying on terraced ground at several places. This debris may mark the position of completely wrecked dwellings or monastic quarters. But no structural remains could be seen above the ground.

A report about ruins to be found near the village of Kala induced me to use one day for a visit from Manglawar to the picturesque side valley which descends from the Narai-sar peak on the south. It meets the route towards the Kōtkai pass and Ghōrband at the Ziārat of Shaikh Bāba close on four miles above Manglawar. Opposite to the gloomy wood sheltering an extensive Muhammadan cemetery near the Ziārat walled terraces known by the name of *Bāzār* could be seen ascending the northern slopes above the main valley. On turning into the smiling side valley I noticed broad steps carved into a bare rock over which the path leads, clear evidence of ancient roadmaking.

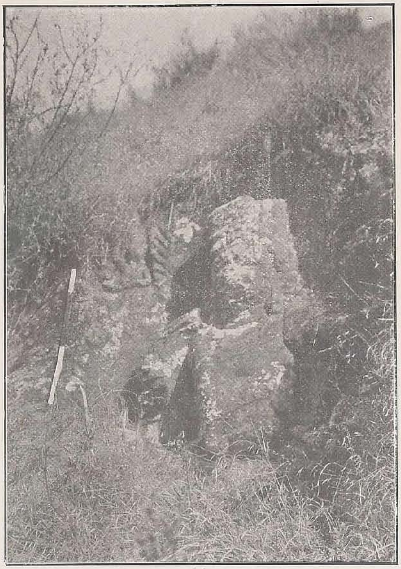

Fig. 36. Rock-carved relievo of Bodhisattva, on Nangriāl hill, Manglawar.

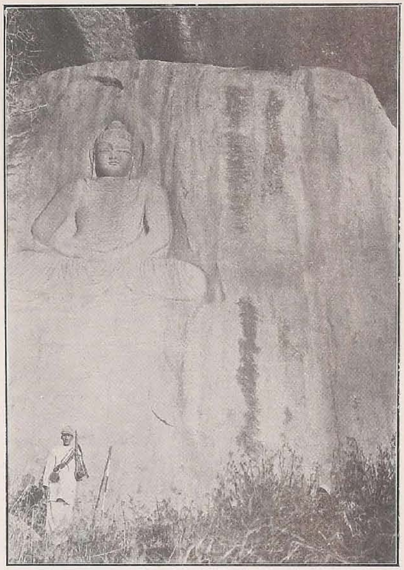

Fig. 37. Relievo of colossal Buddha on rock above Shakhōrai.

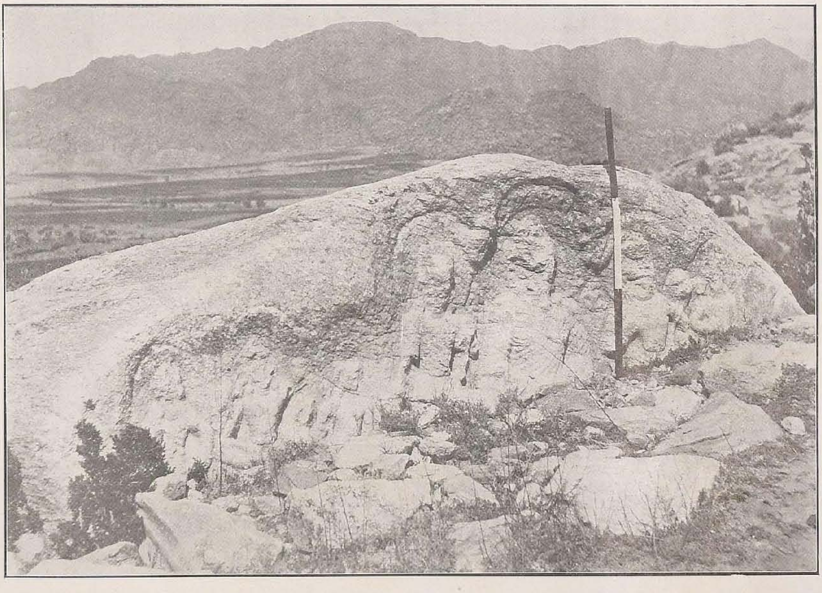

Fig. 38. Rock-carved relievos of Buddhist divinities, below Sharārai site.

The thirty odd homesteads of Kala cluster within a rough wall and occupy a small plateau between two lively streams where an old fort is supposed to have stood. But apart from some terrace walls which probably are pre-Muhammadan, the only ancient object to be seen was a small relievo lying in a field some 150 yards to the south of the hamlet. It shows the seated figure of a Bodhisattva in the familiar pose holding a lotus stem.

Remains on Nangriāl spur.—We then climbed up some 1,200 feet over steep rocky slopes to the top of a ridge which east of Kala descends towards the Manglawar valley. The spur bears the name of *Nangriāl* and on its top bears terraced fields which looked as if they had been cultivated in recent years. At the south-eastern end of a stretch of fairly level ground extending for some 400 yards there stands a ruined tower built with very rough masonry. It evidently was intended to guard the approach from a narrow rocky crest which lies some 200 feet below and connects the ridge with the higher portion of the spur. No definite sign of ancient occupation was met with until descending northward some 800 feet over terraced slopes we found a small relievo with the usual figure of a seated Bodhisattva by the side of a little spring. Ascending once more on the precipitous slope to the north-west I was shown two rock-carved relievo figures close together. Both represent a seated Bodhisattva, probably meant for Avalokiteśvara, with the left leg hanging down and the left hand holding a lotus stem. The larger and better worked of the two images (Fig. 36) is 4 feet high and flanked by two small flying Gandharvī figures level with the halo.

Before leaving Manglawar on March 30th for Chārbāgh I visited a ruin reported in the side valley of *Banjōt* which descends to Manglawar from the south. It proved to be a completely wrecked Stūpa situated on a small plateau of the eastern side of the valley about a mile and a half from Manglawar. The shapeless mound to which the Stūpa has been reduced measures about 120 yards in circumference at its foot and rises to circ. 30 feet in height. Whether it had been dug into for treasure could not be ascertained.

Chārbāgh, reached after a march of less than three miles from Manglawar, is a much larger place than the latter. It is situated at the wide mouth of a valley up which an alternative and much frequented route leads to the Kōtkai pass and thus towards Ghōrband. It boasts of a considerable Bāzār and serves as the local emporium for the numerous villages which stretch along the fertile riverine belt right up to Churṛai.

Ruined Stūpa near Chārbāgh.—The first remains of antiquity attracting attention near Chārbāgh are those of a conspicuous Stūpa standing about a mile to the ENE. by the side of the road leading to Ghōrband (Fig. 39). It raises its dome, completely bared of the facing masonry, to a height of over 30 feet. The diameter of the solid core of rough stones is about 28 feet. A curious feature of the ruin is the absence of any remains which might be taken to mark the usual high bases. This peculiarity seems to lend support to the identification of the ruin with the Adbhuta (Marvellous) stone Stūpa which Hsüan-tsang's *Hsi-yü-chi* mentions some 30 *li* to the north-east of Mêng-ch'ieh-li.

"There the Buddha had at one time preached the Law to the men and gods in order to instruct and guide them. When the Buddha had departed this Stūpa suddenly emerged from the ground. The people surround it with homage and worship and never cease offering perfumes and flowers." The distance and bearing of the ruined Stūpa from Manglawar agree closely enough with those indicated by the pilgrim, and there is no other Stūpa to be found now in this direction. The legend about the Stūpa's miraculous emergence from the ground may well have originated from the fact that it stands direct on practically level ground, lacking the ordinary bases. Heaps of rubble rising over the fields to the north-east may mark the position of monastic dwellings.

Site of Jampūre-ḍhērai.—About a quarter of a mile north of the Stūpa there stretches a low rocky hillock covered with the debris of walled terraces and completely decayed structures. Its flat top, about 50 yards long and 34 yards across, lies some 120 feet above the level of the fields. Abundance of potsherds of ancient make (see Pl. I), similar to those found at Maizere and Shakhōrai above Manglawar, mark early and close occupation. The site is known as *Jampūre-ḍhērai,* and from here most of the coins, mainly Indo-Scythian and Kushān pieces, brought for sale at Chārbāgh, were said to have come. Some small metal images were declared to have been found some years before, buried with a large number of silver coins, at the southern foot of the mound. But all these had been disposed of or melted down. A much effaced fragment of a Græco-Buddhist relievo was picked among the debris of the mound. The Jampūre-ḍhērai evidently marks the site of a kind of acropolis of Chārbāgh.

Riding up the valley to the ENE. for about 1¼ miles and crossing the dry bed of the stream which drains it I visited the small mound formed by a badly decayed Stūpa near the scattered homesteads of the Gujar hamlet of Zundwāla. The mound measures about 70 yards in circumference and is about 20 feet high. No structural features could be distinguished.

Relievo near Zundwāla.—Proceeding thence for half a mile further up the valley I was shown a large stone, partly embedded in the ground and bearing on its face a poorly preserved Græco-Buddhist relievo. When dug out and cleared the slab proved to be 3 feet 5 inches in height. The relievo represents a standing Buddha flanked by a pair of small attendants and by another pair of haloed figures which probably represent Bodhisattvas. The carving on the base, though roughly carved, is of some interest. It shows in the centre a lion facing to the front and on either side of it three bird-headed composite monsters, shown in profile, facing to opposite sides and probably meant for hippocampi. To the east and across a small dry Nullah which a couple of yards higher up holds a spring, there can be traced on the top of a small ridge the walls of badly decayed structures extending over some 90 yards. Together with more ruined walls emerging in isolated patches on cultivated terraces lower down to the west, these remains seem to indicate the position of a Saṅghārāma of some size.

Remains near Mingvalthān.—Crossing from this point north eastwards to the opposite side of the valley the homesteads belonging to the Gujar hamlet

of Mingvalthān were reached. To the north-west of them the slopes of the hillside bear for about 200 yards' distance remains of ruined terraces and walls marking an ancient village site. About 200 yards farther on there descends a glen known as *Chinār-tangē*. Above its mouth there rises a narrow rocky ridge flanked by two steep Nullahs which lower down join. The position offered by the ridge is a strong one as at its upper end it is separated by a sharp dip, some 40 yards long, from the hillside above. Close to the north-east of the upper end of the ridge there issues in the glen a fine spring under a large Chinār tree. The sloping crest of the ridge has been widened by massive supporting walls built with large roughly dressed slabs. Thus three successive terraces are formed, each measuring about 30 yards in length but diminishing in width from 30 yards at the top terrace to 15 yards at the lowest. Below this the ridge drops abruptly to a low rocky plateau. Ancient potsherds lying in plenty over the terraces (for specimens, Ming., *see* Pl. I) show that the terraces had long been occupied, probably as a place of safety.

SECTION iii.—SITES SURVEYED BELOW TŌRWĀL

On April 2nd I left Chārbāgh for Khwāja-khēl, a large village at the mouth of an open side valley through which access lies to two passes leading towards Ghōrband. The march was a short one and led all the way past fertile village lands receiving ample water from the Swāt river. At two points only were ruins to be seen. A rocky hillock situated to the south-east of Dokōrak village and within sight of Jampūre-ḍhērai is covered on its top with foundation walls of roughly built dwellings, closely packed after the fashion of modern villages within an area of about 112 yards by 70. The site is known as "*Alī Bēg-ḍhērai.*" The absence of any masonry of the Gandhāra type and the character of the pottery debris which comprises pieces with stamped or incised ornamentation evidently debased from older motifs, suggested that the site was occupied after Buddhist times.

March to Khwāja-khēl.—Between the villages of Gulibāgh and Nawē-kile I was shown by the roadside an old mound called by the name of *Māsumān-ḍhērai*. It rises to a height of only 10 to 12 feet, with a circumference of about 140 yards. On the west side Gandhāra type masonry is exposed for a short stretch to a height of circ. 2 feet. This and plentiful ancient potsherds prove the antiquity of the mound; but without excavation the character of the structure which once stood here could not be determined.

Heavy rain which lasted almost without a break for twenty-four hours, made it impossible to leave our camp at Khwāja-khēl until the morning of April 4th. Even then it was not easy to cross the greatly swollen stream which descends from the east near the village and then to get ferried on a skin raft across the Swāt river racing in flood. There on the right bank vestiges of antiquity were reported at several points. A 'carved stone' was to have been inspected near the village of *Sambat* where the road up the right bank

passes near the foot of a rocky ridge. But this stone which may have been the remnant of a rock-cut relievo proved to have been broken up and used in the construction of the good road which the ruler had caused to be made about two years before for the use of laden transport up that side of the valley. About a mile beyond a large but low mound was passed close to the road. It lies about half a mile south of the village of *Baidara*. No remains of walls could be traced on the surface. But the abundance of ancient potsherds left no doubt about the early occupation of the site. When on our return from Tōrwāl we camped at the village of Shālpin in the valley above Khwāja-khēl there were brought for my inspection two large earthenware jars (Fig. 63) which were said to have been dug up years ago by people of Baidara from this mound.[1] Their mouths with widely everted lips are peculiar and distinguish them from any modern pottery of this region. The same is the case also with the small jug (Baid.) of elegant shape shown in Pl. I.

Site of Surai-tangē.—From near the lower end of Baidara village we turned off into an open recess of the hills, known as *Surai-tangē* and after ascending for about a mile over a cultivated alluvial fan reached a small spring sheltered by a fine Chinār tree. The hillside rising in a semicircle above it is divided by a number of rib-like rocky ridges approaching each other at their lower ends. Four of these ridges bear remains of ancient terraces and walls of decayed structures. The two ridges in the middle run down to a level of about 60 feet above the spring. There their ends are joined by a large terrace of which the facing wall, constructed with massive masonry of the Gandhāra type, extends for a distance of over 100 yards and still rises in fair preservation to an average height of 15 feet.

On the top of this terrace and about 19 feet from the face of the supporting wall digging has disclosed horizontal courses of masonry which belong to the vaulting of a narrow passage. This in its interior is completely blocked with debris; but the vaulting traceable for about 10 feet shows that the passage extends towards the face of the supporting wall. It seemed difficult to make out without a thorough clearing what purpose this vaulted passage was intended to serve. It possibly may have protected approach to the spring, assuming that in ancient times its water was caught higher up than the point where it comes to the surface at present. Such approach would have been essential for the safety of the occupied area; but no continuous wall lines intended to defend this could be traced in the course of a rapid survey. There were plenty of fragments of ancient pottery (for a specimen, see Sur., Pl. I) to be seen including decorated pieces of the same type as found at most of the sites occupied in the Buddhist period from Bīr-kōṭ onwards.

Our onward march lay past the large villages of Kuz and Bar Durush-khēl and ultimately brought us across a somewhat frail bridge in course of construction under the Bādshāh's orders to camp near his newly built fort of Paitai

[1] Fig. 63 shows these jars on the extreme right and left. Between them are seen a plain jar and the fragment of a cup with ornamental 'ribbing' (see Pl. I), also brought to me at Shālpin. These were said to have been found at a place called Madar Khān-Sarai near Jānū, a village passed between Khwāja-khēl and Shālpin.

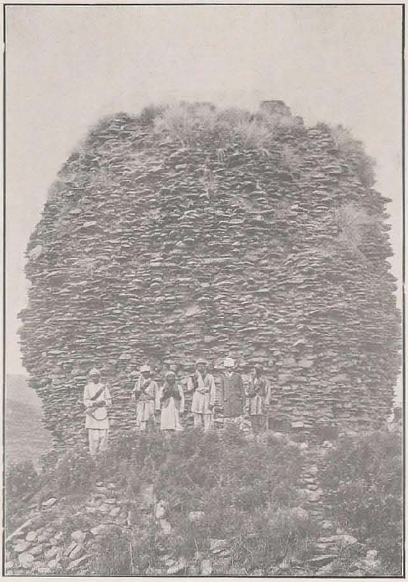

Fig. 39. Ruined Stūpa stripped of masonry facing at Jampūre-ḍhērai, near Chārbāgh.

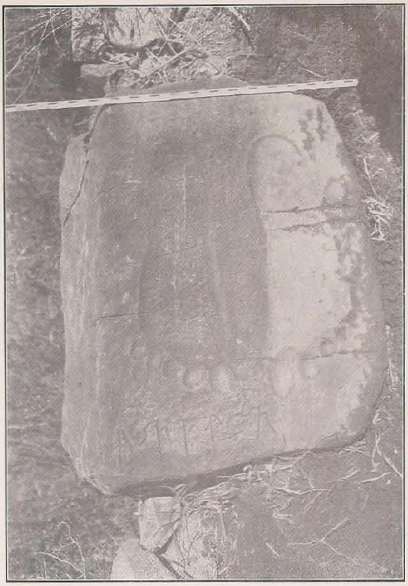

Fig. 40. Stone with Buddha's miraculous foot-prints and Kharoshṭhī inscription near Tirāt.

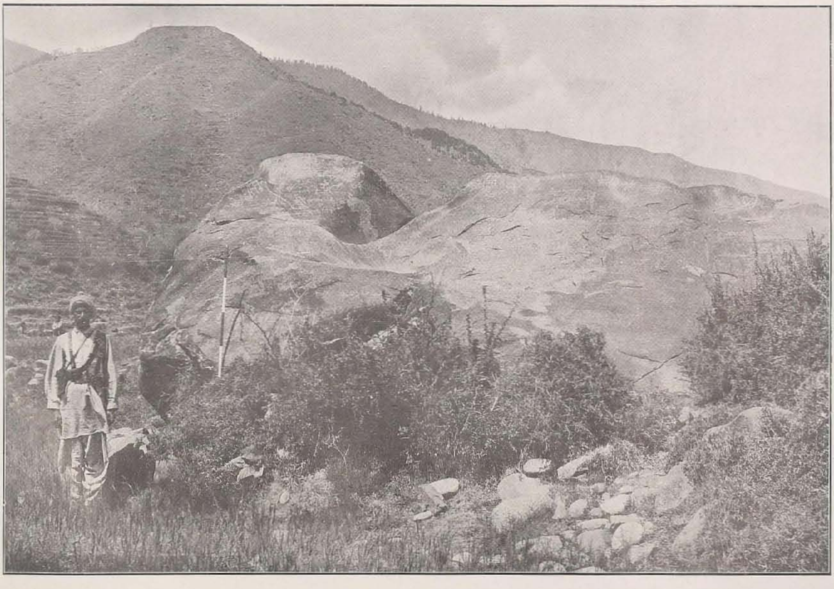

Fig. 41. Boulder marking spot of 'Buddha's clothes-drying' on right bank of Swāt river, opposite Jārē.

on the river's left bank. On the following morning our survey was resumed on the right bank and soon showed to my satisfaction that the belief prevalent in Lower Swāt about there being no Buddhist remains to be found above Chārbāgh was wrong.

Ruins of Ragast site.—After recrossing the river by the bridge below Paitai our way lay up the now gradually narrowing valley first to the village of Kālā-kōṭ. Near the bridge abundance of ancient pottery debris lying on the slope of a fine well-wooded spur attracted attention. Then after crossing the considerable stream which comes from the Lālkū valley we passed the picturesque village of Lāndai. Having followed the road for half a mile farther we turned off to the north-west into a wide recess of the hillside known as *Ragast.* It is enclosed by a semicircle of spurs terraced for cultivation and at a height of about 300 feet above the road holds a small Buddhist site known as *Kārgha-ḍhērai.* There we came first upon a much decayed Stūpa mound rising about 12 feet high above a small plateau. Two short sections of circular masonry indicated a diameter of about 24 feet either for the dome or the base immediately below it.

Next ascending for about 110 yards to the north I came upon the ruin of a structure of unusual shape. The walls 4½ feet thick and still standing in places to a height of 6 feet are those of a hall 30 feet long and 10 feet wide on the inside, with apsidal ends to the north-west and south-east. The entrance appears to have lain from the south-west where the wall is now broken. The middle of the north-western apse is pierced by a window, only 8 inches wide outside and splayed out to 2 feet within. The exact purpose of the structure could not be determined; but it might have served as a small monastic meeting hall or Vihāra. A slightly higher spur about 150 yards to the north-east, as the rough sketch plan, Pl. 8, shows, bears walls built in the Gandhāra fashion supporting terraces. On the uppermost of these are two small mounds of circular shape which suggest completely decayed Stūpas. One shows a diameter of about 25 feet, the other is much smaller. On a lower terrace to the south-west there are indistinct remains of what appears to have been a small vaulted rotunda. Over the whole of the ground ancient potsherds could be picked up.

Large boulder with graffiti.—But a site of much greater interest awaited inspection further up the valley. After having descended eastwards to the road and followed this for about a mile along the foot of the hillside we arrived at the spot where a large 'inscribed rock' was to be shown to me. But before descending to it from the road my attention was attracted by a mound some 17 feet high and about 70 yards in circumference which obviously marked a completely decayed Stūpa. It rises close to the east of the road; descending from there for a distance of about 120 yards over ground terraced for cultivation there is reached a huge boulder (Fig. 41). It lies on ground covered with water-worn rubble and must have once been deposited by the river which now flows in a deep-cut bed close below this ground. The boulder, apparently of granite and smoothed on the surface by water

action, measures fully 30 feet in length, 18 feet across where widest and 12 feet in height at its north-western end. Plenty of other boulders lie near by on the western bank of the river, but none of them approach in size this huge block. On the opposite side of the river stretch the fields of the village of Jārē.

It is not surprising that so great a mass of rock rendered conspicuous by its isolation should have attracted local worship from early times. That this has been the case here is clearly proved by the numerous graffiti with which the smooth surface of the rock on the gently slanting concave side facing south-east is covered (Fig. 41). The majority of these graffiti are in Brāhmī characters of a type resembling Śāradā and the rest in Arabic writing. Most of the former are found at the north-western end of the rock beyond a hollow which passes through its upper portion, and along its narrow crest. Owing to the great hardness of the stone all these graffiti are very shallow and those in Brāhmī much weathered. The word *Śrī* can be made out repeatedly. Among the other characters I did not succeed in making out any complete word. But epigraphic experts examining these scribblings on the spot may fare better. Whether satisfactory estampages could be obtained seemed to me doubtful. Among the Muhammadan graffiti which were less weathered the Islamic formula of faith is found twice as well as the name and high sounding title of *As-sultānu 'l 'ādilu Muḍāfar al dunyā wālidain al Muḍāfar Muḥammad Mūsa.* Over the middle portion of the side to the south-east the surface of the rock had scaled off over a space fully 11 feet high and 8 feet wide ; whether this had occurred entirely from a physical cause or, at least partly, through the agency of man seemed difficult to determine.

Rock of Buddha's 'clothes-drying.'—This detailed description of the rock has appeared desirable as I believe that it can safely be identified with the great stone on which according to a legend uniformly related by three Chinese visitors of Swāt, Fa-hsien, Sung Yün and Hsüan-tsang, Gautama Buddha had dried his clothes after washing them and which miraculously retained impressions of them. The accounts given by all three pilgrims mention this spot in close connexion with another sacred site where the Buddha's foot-prints left on a stone were to be seen by the pious. As this stone fortunately still survives at Tirāt, within a few miles of the 'clothes-drying rock' just described, it will be convenient here to quote the passages relating to both these sanctified spots in conjunction.

Fa-hsien's and Sung Yün's accounts.—Fa-hsien who reached Swāt about A.D. 403 from Darēl by the forbidding route through the gorges of the Indus tells us: [1a] "Tradition says that when Buddha came to Northern India he visited this country (Swāt) and left behind him a foot-print. The foot-print appears to be long and short according to the faith in each particular person, and such remains the case up to the present day. The stone too on which Buddha dried his clothes, and the spot where he converted the wicked

[1a] Cf. Giles, *Travels of Fa-hsien*, p. 11.

dragon may also still be seen. The stone is fourteen feet in height by ever twenty in breadth, and one side of it is smooth."[2]

Sung Yün who arrived in Swāt early in A.D. 520 from the side of Kāfiristān and Chitrāl,[3] mentions the rock where the Buddha dried his clothes immediately after relating his visit as envoy of the Chinese court to the king of Wu-ch'ang or Swāt.[4] He tells us that after this visit he and his fellow monk and envoy Hui-shêng "left the town" by which probably Mêng-ch'ieh-li, Hsüan-tsang's capital, or Manglawar is meant, "in order to visit the traces where the Buddha taught, one after another. To the east of the river is the spot where the Buddha dried his garment in the sun. At the time when the Tathāgata preached conversion in the kingdom of Wu-ch'ang, a Nāgarāja became angry and raised a great storm of wind and rain. The *saṁghāṭi* of the Buddha became entirely wet inside and outside. When the rain stopped the Buddha sat down at the foot of this rock turning to the east and dried his Kashāya [robe] in the sun. Though many years have since passed the impressions are still as clear as if they were quite recent. It is not only the outlines which are clearly visible but even the finest threads. At first when one goes to see [this impression] it seems as if it did no longer shine through; but if one scratches [the rock] the marks become clear. At the spot where the Buddha had sat down and where he let his garment dry in the sun, there are commemorative Stūpas."

Sung Yün next refers to a lake west of the river in which a miracle-working Nāgarāja lived. Hsüan-tsang relates the legend connected with this 'dragon lake' at great length, and the bearing and distance recorded by him allow us to locate it, with certainty, as first pointed out by Sir Harold Deane, at the Saidgai lake to the west of the watershed between the Swāt and the Panjkōra rivers.[5] Sung Yün then continues: "Eighty *li* to the north of the royal city is the stone on which the Tathāgata walked. A Stūpa has been raised around it. The place where he walked on the stone looks like the mud left by some one who might have walked in the water. The measurements one takes [of this foot-print] are not constant; for at one time it is long, at another short. Now a sanctuary has been raised there where there are about seventy monks. Twenty steps to the south of the Stūpa there is rock from which issues a spring. Once the Buddha having come there to clean himself, chewed a small willow branch. Planted in the ground it sprouted at once and has now become a large tree called *P'o-lou* in the language of the barbarians."

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[2] Regarding the length of the Chinese foot in the Chin period, roughly corresponding to that of Fa Hsien's visit, see *Serindia*, i. p. 374.

[3] Regarding Sung Yün's route, see *Serindia*, i. pp. 9 sqq.

[4] See Chavannes, 'Voyage de Song Yun,' *B. E. F. E. O.*, iii (1903), pp. 409 sq.

[5] Cf. Julien, *Mémoires*, i, p. 141; Watters, *Yuan Chwang*, i, p. 238; Deane, 'Notes on Udyāna,' *J. R. A. S.*, 1896, p. 661.

It is interesting to note that Sung Yün makes his far shorter reference to this lake just in connexion with the 'rock of the clothes-drying' and the foot-print of the Buddha. The nearest route from the Swāt valley to the Saidgai lake leads in fact up through the Lālkū-dara which debouches at Lāndai, only some two miles below the rock.

Hsüan-tsang on sacred spots of Uppermost Swāt valley.—Hsüan-tsang in his somewhat briefer account of the two sacred spots starts from the spring of the Apalāla Nāga, the supposed source of the Swāt river, which in agreement with Sir Harold Deane must be placed at the point just below Kalām village where the streams from the valleys of Utrōt and Ushu meet to form the head of the Swāt river.[6] The *Hsi-yü-chi* tells us as follows:[7] "About thirty *li* south-west from the Apalāla dragon spring, and on the north bank of the river, is seen a large flat stone with the Buddha's foot-prints; these foot-prints, the size of which varied with the religious merit of the measurer, were left by the Buddha when he was going away after having converted the dragon. A building has been erected over them and people from afar and near come to make offerings of flowers and perfumes. Some thirty *li* farther down the river one comes to a rock on which the Buddha had dried his robes. One sees there the lines of the *Kashāya* material still distinct as if they were engraved."

Hsüan-tsang's account, though brief, is yet, as usual, more precise in its local indications than those of the other two pilgrims. It makes it quite certain that both of the sacred spots, which he links up as the others do, lay near the right bank of the Swāt river; for as he makes this "flow away from its source south-west,"[7] 'the north bank' referred to in the above quoted passage can only mean the right bank. That the distance of thirty *li* he indicates between the Apalāla dragon spring, marking the source of the river, *i.e.*, Kalām, and the stone of the foot-prints is wrong, is definitely established by the discovery of this stone near the village of the Tirāt, to be described presently. But this error of distance, paralleled by other instances in the *Hsi-yü-chi* and probably arising from some corruption of the text, need not shake reliance on the indication furnished regarding the relative position of the 'clothes-drying rock.' That this is accurate enough is clear from what we shall presently note about the place where the stone with the foot-prints and the Kharoṣṭhī-inscription attesting them as those of the Buddha is found.

Identification of 'Clothes-drying rock.'—Before, however, leaving the large boulder by the right bank of the river, now safely identified, I may point out that its dimensions agree sufficiently closely with what Fa-hsien records of the height and length of the stone. In respect of Sung Yün's description we meet indeed with a discrepancy in as much he places the 'clothes-drying rock' to the east of the river. But in view of what we know of the circumstances under which Sung Yün's extant relation was compiled from different sources this mistake cannot altogether surprise. In any case what it states about the Buddha having sat down 'at the foot of this rock turning to the east' to dry his garment in the sun, well agrees with the actual position of the rock which with its broad smooth side faces to the south-east. In the same way what Sung Yün tells us about the practice of scratching the rock surface in order to bring out more clearly the marks left by the sacred fabric,

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[6] See Deane, *loc. cit.*, *J. R. A. S.*, 1896, p. 656.

[7] Cf. Julien, *Mémoires*, i, p. 135; also *Vie*, pp. 86 sq.; Watters, *Yuan Chwang*, i, p. 231.

helps to explain the scaled off appearance which the surface on that side now presents. Similarly Sung Yün's mention of commemorative Stūpas is borne out by the presence in the close vicinity of the rock of the ruined mound already referred to. The sloping ground between the foot of the hillside and the river bank is covered with heavy detritus and alluvium and may well hide other and smaller remains.

Survival of local worship.—I have had elsewhere occasion to indicate frequent instances in which local worship of Muhammadan times survives at sites sanctified by earlier Buddhist tradition.[8] The Arabic graffiti on the rock showing the Kalimah clearly attest this here, too. Curiously enough, local worship appears here to have derived fresh nourishment from a recent event. Between the Stūpa mound and the road I found a grave mound decked with votive offerings of various kinds. Under it lay the remains of an unfortunate Afrīdī who two or three years before had come to these parts as a trader of modern rifles and had been murdered in this neighbourhood by some Kohistānīs. His body had appropriately been brought here for burial and is now receiving due worship as the resting place of a *Shahīd* or martyr.

Estampage secured by Sir Harold Deane.—On leaving this spot I proceeded up the valley to visit the second 'inscribed stone' reported. It was described as lying near the village of Tirāt, and this left little doubt in my mind about its being the same as the one of which an ink impression had in 1896 reached Sir Harold Deane from that locality. It had been brought to him by 'Abdul Hanān, the Pathān agent above mentioned, who at that time had not yet turned into a forger of such things. The estampage showed two big foot-prints marked with the Buddha's emblem, the *cakra* or wheel of universal sovereignty, and below them a line of bold Kharoshṭhī characters. On receiving the estampage from Sir Harold towards the close of 1897 I lost no time in sending it on to Professor G. Bühler, the greatest of Indian epigraphists of his time. In my accompanying note I expressed the belief that, as already surmised by Colonel Deane, the inscribed stone was probably the same that the Chinese pilgrims describe as showing the miraculous foot-prints of the Buddha. Professor Bühler promptly published a brief notice of the inscription, a couple of months before his tragic death at Easter of 1898,[9] and this showed that the conjecture was well founded; for the legend as deciphered by him describes those foot-prints as left by Śākyamuni.

We first followed the road for about two miles up the river through the defile known as Tirāt-tangē and covered with luxuriant growth of cedars, firs and wild olives. Then above the village of Mōrpandai we left the road and turning north-westwards ascended steeply over thickly wooded slopes of the hillside which faces the mouth of the side valley of Tirāt. After arriving within half a mile or so of the village which gives its name to the valley and occupies a steep spur on its opposite side, we had to clamber up a series of

[8] See my 'Note on Buddhist local worship in Muhammadan Central Asia,' *J. R. A. S.*, 1910, pp. 839 sqq.; also my note, *Rājataranginī*, II, p. 340.

[9] The notice was printed in the *Anzeiger*, 1898, of the Imperial Academy of Vienna, Philos.-historische Klasse

cultivated terraces before reaching the small plateau upon where the inscribed stone was to be seen. It proved to lie by the side of a footpath which skirts a field known as *Mullānai-paṭai* ('the field of the Mullah's wife'), and to have been set up with other large stones to fence in that field. The stone was half buried in the ground with its inscribed surface turned towards the field, and only one of the footprints was exposed with the end of the inscription. The Mullahs who own the field and had been summoned to the spot, readily agreed to the stone being completely cleared from the ground. It then proved identical with the one shown by the well-remembered estampage.

Stone with Buddha's footprints near Tirāt.—The large block (Fig. 40) measures on its smooth surface 3 feet 4 inches by 2 feet 8 inches. Its thickness is nearly 4 feet, and its sides and back quite rough. It was probably the natural flatness of one face which had invited some pious hands to decorate it with the sacred foot-prints of the Buddha, subsequently worshipped as a kind of *svayaṁbhū tīrtha.* According to the statement of the present owner of the field and two other local greybeards the stone had originally lain where the footpath now runs and had been moved to its present position only after the impression had been taken by Colonel Deane's agent. At that time the western side of the Swāt valley was under the Nawāb of Dīr's rule.

The foot-prints which are engraved in a very shallow fashion measure 1 foot 7 inches in length and show the *cakras* in the middle of the soles but faintly. This want of firmness in the outlines of the foot-prints agrees with what Sung Yün has noted of their looking as if left in mud by some one who has before walked through water. The same may help also to explain why their size was believed to vary in the eyes of pious beholders 'with the religious merit of the measurer', as Hsüan-tsang put it. That the letters of the inscription below are far more distinct than the details of the foot-prints is what was reasonably to be expected. No supernatural origin would be claimed for the inscription. It was meant to attest the sacred character of the foot-prints, as shown by Professor Bühler's reading and translation: *Bodhasa Sakamuṇisa* [*pada*]*ṇi*, 'The feet of Buddha, the Śākya ascetic.'

The language is a Pāli of the dialectic variety represented by the Kharoshṭhī inscriptions of the North-West Frontier region. The Kharoshṭhī characters are of the type found in Ś'aka inscriptions and coin legends of the first century B.C. This makes it possible to ascribe the 'pādukās' with certainty to a period preceding by at least four or five centuries the visit of the earliest among the Chinese pilgrims who notice them.

Ruined mounds near inscribed stone.—The statement of both Sung Yün and Hsüan-tsang as to the sanctuary erected at this spot is completely borne out by the presence of a mound marking a ruined structure at a distance of thirty yards to the west of the point where the stone with the sacred foot-prints now lies. It is composed of large unhewn slabs of stone and measures 90 yards in circumference at its foot. Its height is about 20 feet. The character of the structure could not be definitely made out without excava-

tion. But that it was more likely to have been a shrine of some kind than a Stūpa seems to me to be indicated by the fact that the top measures fully 40 feet in diameter and is flat instead of showing the conical shape usual in the case of decayed Stūpas.

To the south of this ruin at a distance of about 36 yards I found another decayed mound measuring about 30 feet across at the top. Its back adjoins a terraced field, while elsewhere it rises some 8 feet above the level of the adjoining ground. This was found very boggy at the time of my visit, paid late in the day and necessarily rather hurried. Without enquiring at the spot I ascribed this condition of the ground to the effect of the heavy rain experienced two days before during our enforced halt at Khwāja-khēl. Sung Yün's description was not in my recollection at the time, and I now regret not to have looked out for the spring which that pilgrim refers to as issuing 'some twenty yards to the south of the Stūpa.' Subsoil moisture gathering below that second mound might well still mark its position.

But even without verifying this point the happy discovery of that inscribed stone with the foot-prints, due in the first place to Sir Harold Deane's search thirty years before my visit, has furnished us with a definitely fixed point in the *topographia sacra* of ancient Swāt. With this point safely identified we need not attach importance to the fact that the distance between it and the inscribed boulder by the bank of the Swāt river, only about four miles is somewhat less than the 30 *li* which the *Hsi-yü-chi* notes between the two spots, nor to the fact that the distance of 80 *li* which Sung Yün reckons from the royal city (Mêng-ch'ieh-li) to the stone with the foot-prints, is underestimated.

A descent brought us down to the torrent flowing at the bottom of the Tirāt valley. Having crossed it we gained its main village perched high on a projecting shoulder of the hillside. Thence a steep track over terraced rice fields led down again to the Swāt river. After returning by a bridge to its left bank we reached by nightfall the large village of Churṛai and there the entrance to that alpine portion of the Swāt valley which is known as Tōrwāl.

SECTION iv.—TŌRWĀL AND ITS OLD CRAFTS

Below Churṛai there ends that submontane part of the Swāt valley which with its fertile *thalweg* easily irrigated from the river and occupied mainly by rice fields is at all times assured of plentiful harvests and therefore capable of supporting a comparatively dense population. That it did so in ancient times is made certain by the abundance of remains of Buddhist times. Only such a population and an abundance of wealthy people among it could have maintained so large a number of monastic establishments as attested by the ruins and the descriptions of the Chinese pilgrims—Hsüan-tsang mentions fourteen

hundred as their number in former times, with eighteen thousand monks [1]—or constructed Stūpas of such imposing size as I had occasion to survey and describe.

Alpine character of Tōrwāl.—Above Churṛai which lies at an elevation of close on 4,000 feet, conditions rapidly change. The river has cut its way there, right down from Kalām, through a succession of narrow gorges. Its bed lies so deep that practically nowhere can water be secured from it for irrigation of the small laboriously constructed terraces cultivated on the steep sides of the mountains. The little valleys which descend to the river from the snowy ranges on the either side are still more confined and allow but the scantiest room for agricultural pursuits. The elevation of the valley bottom rapidly increases and on either side there close in high mountain ranges. They rise between Chōḍgrām and Kalām to heights close on 19,000 feet and retain snow everywhere along their crests for a great part of the year. Thus climatic conditions result which do not permit of production for more than a very limited population.

The rough estimate which I obtained and which may well prove to be somewhat exaggerated put the population at about 2,000 households for the whole of Tōrwāl. Even this limited population could not maintain itself here but for the fine conifer forests clothing the lower slopes of the mountains. These enable the people of Tōrwāl to supplement the very scanty produce of their soil by resources derived from the cutting and sale of timber. The convenient waterway afforded by the Swāt river allows them to supply this to both Lower Swāt and the Peshawar valley. Even thus I found that a considerable portion of the people who have their homes at Braniāl, the only village of any size in Tōrwāl, have to earn their livelihood by work as wood-cutters in high valleys outside Tōrwāl such as Ushū, Tangīr and Kandia.

Dardic speech of Tōrwālīs.—Yet the population of this small alpine tract has been able to retain its separate existence in race and speech and, until quite recently, also politically. This is due mainly to the natural defences which the narrowness of the Swāt river gorges between Kalām and Churṛai, a distance of not quite 30 miles in the direct line, affords almost everywhere. The tongue spoken in Tōrwāl is a distinct member of the Dardic branch of languages, as clearly shown by Sir George Grierson in his analysis of the Tōrwālī stories and linguistic specimens collected by me during my short visit to the tract.[2] There is every reason to believe that the inhabitants of Tōrwāl also in racial respects represent a remnant of that Dardic-speaking population which we are justified in assuming to have prevailed throughout the Swāt valley before the Pathān conquest.[3] Wedged in between the

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[1] See Julien, *Mémoires*, i, p. 132; Watters, *Yuan Chwang*, i, p. 226; also Giles, *Travels of Fa-hsien*, p. 11.

[2] See the introduction to Sir George Grierson's publication, *A sketch of the Tōrwālī language*. In notes contributed to the same I have recorded the circumstances in which those linguistic materials were collected in the course of my tour as well as some observations on the racial character of the Tōrwālīs.

[3] The anthropometric data obtained by me among the people of Tōrwāl are still awaiting analysis and publication by Mr. T. A. Joyce, Deputy Keeper of Anthropology, British Museum. As far as my personal impressions can be relied on, the measurements and other data observed distinctly indicate racial relationship to the *Homo Alpinus* type which prevails among the tribes inhabiting the Hindukush valleys from Kāfiristān eastwards.

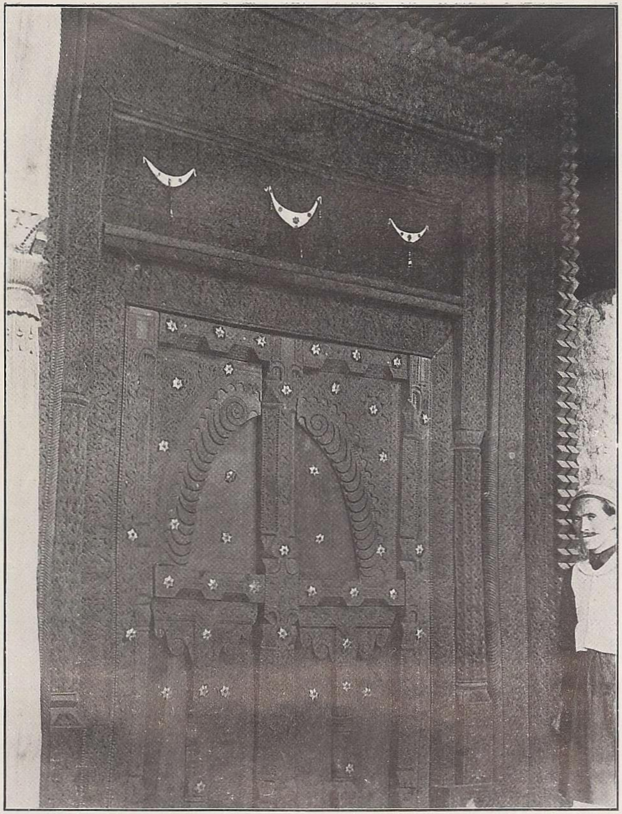

Fig. 42. Wood carvings on door of house, Churṛai, Tōrwāl.

Fig. 43. Carved wooden pillars in loggia of principal mosque, Braniāl.

Yūsūfzai clans of Upper Swāt and the Gārwī-speaking hill tribe on the headwaters of the Swāt river above Kalām, the Tōrwālīs remained a small independent community until 1922 when the absence of most of their fighting men engaged in a feud with the people of Kalām and Ushū enabled the ruler of Swāt without serious difficulty to absorb Tōrwāl, too, in his new dominion.

According to the local tradition of Tōrwāl the conversion of its people to Islām does not date back much further than eight generations. Hence 'heathen' times were not buried here in so distant a past. But Buddhism must have disappeared centuries before the preaching of the Faith reached this alpine valley, and considering how poor its people must always have been, it could scarcely be expected to have left monumental traces behind here. What shrines or Stūpas ever existed are likely to have been built of timber like all present structures in these high valleys. This complete absence of ancient remains in Tōrwāl made it all the more gratifying to come upon survivals of antiquity at least in two crafts.

Coloured blankets from Churṛai.—One of them is represented by those heavy and gaily but tastefully coloured woollen blankets that the North-west of India knows as 'Swātī Kambals' or rugs. They are all brought from Churṛai and are mostly made by the womenfolk in the side valley of Chihil-dara which descends to that place from the high snowy range towards Kāna and Dubēr on the east. To a lesser extent they are woven also in other side valleys of Tōrwāl. That this local industry is as ancient as the Dard race that retains its hold there is proved by a passage of *Mahāvāṇija-jātaka* which the great French Indologist, M. Sylvain Lévi, quotes in his comments on that curious Buddhist Sanskrit text published by him under the title of 'Le catalogue géographique des Yakṣa dans la Mahāmāyurī.'[4] The Jātaka passage referring to commodities of great value mentions also 'the fabric of Kāsī' or Benares, and the *kambala* of *Uddiyāna*. There can be no doubt about M. Sylvain Lévi rightly recognizing *Uḍḍiyāna*, the true ancient name of Swāt, in that of the locality here mentioned. It is equally certain that the rugs of Swāt are meant, the term *kambala* (the Sanskrit designation for a woollen blanket) being the same that is now applied in Indian vernaculars to textile products such as the rugs of Tōrwāl.

Indian literature can scarcely contain any earlier testimony to the antiquity of a still flourishing local industry than this Jātaka passage. Unfortunately though the ancient skill in weaving and the use of traditional patterns still survive, the introduction of aniline dyes has here, as elsewhere in the East, brought about a sad and rapid decline in the harmonious blending of colours. Rugs produced with the fine old vegetable dyes, such as were still obtainable at Peshawar some thirty years ago, could now no longer be found for me even in the remote tract where this manufacture has had its home for so many centuries.

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[4] See S. Lévi, *J. Asiat.*, 1915, janv.-février, p. 105.

Wood-carving at Churṛai and Braniāl.—The other local craft which in Tōrwāl and to a lesser extent also in other parts of Upper Swāt, retains evidence of ancient skill is that wood-carving. Both at Churṛai and Braniāl I was greatly struck by the amount of fine wood-carving, old and new, to be seen in mosques and the houses of well-to-do families. The houses themselves, crowded together, especially at Braniāl, in narrow lanes resembling rabbit-warrens, are built mainly of timber with wattled walls. In some respects they curiously recalled those houses dating from the early centuries after Christ which I had excavated from the sands of the Taklamakān at the Niya Site and elsewhere. My general impression was that the methods of building and living in this mountain tract, difficult of access and little exposed to outside influences, cannot have changed greatly since the times when lower Swāt with its vastly greater economic resources enjoyed its flourishing civilization of the Buddhist period under Kushān rule, or even earlier when Indo-Greek chiefs first implanted traditions there as in Gandhāra of art and material culture derived from Hellenistic models.

Survival of ancient motifs.—These traditions had clearly left their mark in a variety of decorative motifs of purely Graeco-Buddhist style plentifully displayed in the wood-carving on the pillared loggias of mosques and on doors of headmen's houses at Braniāl. Many of the most frequent motifs familiar in Gandhāra relievos as well as in wood-carvings from the early centuries of our era at sand-buried sites of the Tārīm basin have survived there. Among them are floral scrolls often including the acanthus and palmettes; diapers with a four-petalled clematis-like flower or the open lotus; egg-and-dart borders, etc. A detailed analysis of such motifs and of the more elaborate geometrical patterns of quasi-Byzantine type which the advance of 'Saracenic' style with Islamic influences has added to this early decorative stock, would require closer study than I was able to find time for either at the spot or since. But an examination of some of the photographs taken of such carvings (Figs. 42, 43,) and of such specimens as I secured for the New Delhi Museum in the shape of old carved brackets and panels thrown away as useless lumber (Figs. 44, 45), will help to bear out these observations.

The rough drawings of characteristic schemes of ornamentation which I caused local craftsmen to make for me, still await reproduction by a qualified hand. On the other hand it was curious to note that in the architectural features of those carvings, such as the slender columns and the elaborate voluted ends of the brackets, the influence of later Saracenic, *i.e.* Persian, style is much more marked. But of this Persian influence prevalent already at an earlier stage we have indications also in the decorative relievos of Gandhāra. I may add that distinct evidence of the survival of Graeco-Buddhist ornamental motifs had forced themselves upon my attention also in Chitrāl, Darēl and elsewhere in the Hindukush region.[5] But nowhere was the evidence of it so striking as in this craft of the Tōrwāl wood-carvers.

[5] Cf. *Serindia*, i. pp. 35 sq., 47 sqq., with Figs. 15, 16; *Innermost Asia*, i. pp. 30, 45, note 6a.

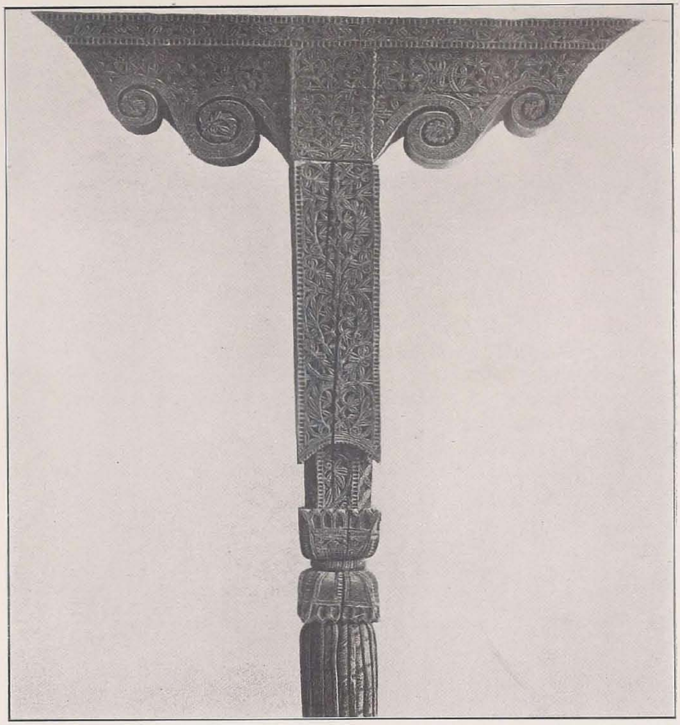

Fig. 44. Carved wooden pillar from Hujra, Braniāl.

(Scale 1/10)

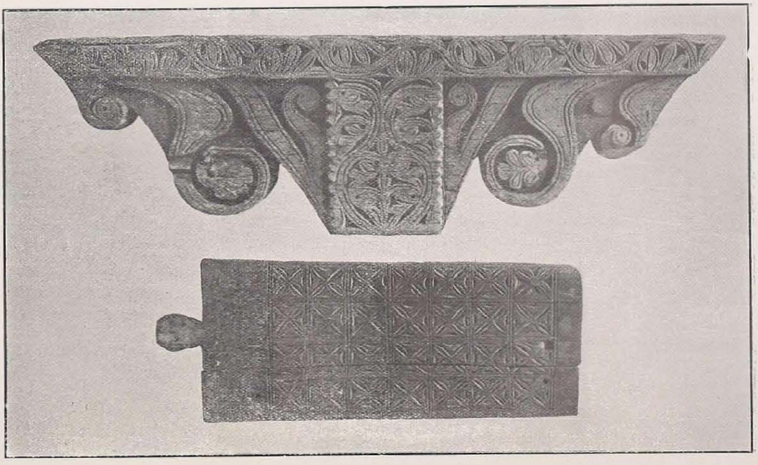

Fig. 45. Carved wooden double bracket and 'Takhtī' from Braniāl.

(Scale 2/7)

During the ten days, from April 6th to 15th, which I was able to devote to Tōrwāl, I visited the main valley right to the northernmost border of the Bādshāh's dominion opposite to Kalām. I thus was able to acquaint myself with the main physical features of a fascinating alpine tract which no European eyes had seen, perhaps since the time when the sway of Indo-Greek rulers extended to the Swāt valley, and to collect useful materials concerning its people and language. But these observations do not call for record here.

Return from Tōrwāl.—The marches of April 16th and 17th which carried me down from Churṛai along portions of the right bank of the river not previously visited, added but little of antiquarian interest to previous observations. The big boulder bearing the marks of the Buddha's 'clothes-drying' proved a very conspicuous object also as seen from across the river. Half a mile below it I found a colossal relievo of a seated Bodhisattva, carved on a large detached rock lying close to the roadside. As seen in Fig. 62, wayfarers of the true faith have taken care by heaped up stones to hide the lower portion of the seated figure as far as its navel. From there up to the top of the head crowned by a small Dhyāni-buddha figure the relievo measures 7 feet 6 inches. The curving lotus stem carried in the left hand makes it probable that an Avalokiteśvara is intended. The sculpture, though late work, shows a certain grace and freedom.

Before reaching Khwāja-khēl we turned off from the Swāt river to the east in order to move by the Karōrai pass across the watershed to those tracts on the Indus which I wished to visit in connexion with the search for Aornos. On the way to the village of Shālpin below the Karōrai pass we passed a small plateau, known as *Kakhī-ḍhērai*, which debris from decayed dwellings and plentiful fragments of early pottery (Pl. I) mark as an ancient village site. Similar remains were said to exist also at the mound of *Bālā-ḍhērai* about a mile off to the north-west.

While our camp stood at Shālpin where inclement weather detained us on April 18th there was brought to me for inspection a small relievo, about 2 feet high, representing a seated Buddha. It was said to have been found in a torrent bed near the village of Chinkōlai, about a mile and a half to the NW. of Shālpin. Its surface, in fact, showed evidence of prolonged exposure to water action. Two ancient jars which were also brought to me at Shālpin and which Fig. 63 shows in the middle, were declared to have been dug up at a spot known as Madar Khān-Sarai near Jānū, a village about a mile to the west of Khwāja-khēl. The smaller one of these jars is decorated on its sides with that kind of flat 'ribbing' which finds of pottery in Sīstān and Northern Balūchistān allow us to associate with a period roughly corresponding to Sasanian times. Adding to this a report of ruined dwellings to be seen on the hillside south of Bābu village, we have thus good reason to believe that this wide and fertile side valley, too, has its full share of remains attesting close settlement while Buddhist civilization flourished in Swāt.

CHAPTER. IV—THE SEARCH FOR AORNOS

SECTION i.—THE RETREAT OF THE ASSAKĒNOI

The reasons which induced me on my return from Tōrwāl to move east to the hill tract towards the Indus are so closely connected with Alexander's operations immediately following his campaign in the Swāt valley that it seems best to acquaint ourselves here in the first place with what we can learn about those operations from the classical records. Arrian who alone gives a connected if succinct account of them,[1] makes it clear that the capture of Ōra had brought Alexander's campaign in the country of the Assakēnoi to a triumphant conclusion. He tells us, as we have seen already, that after the fall of Ōra all the people of the country abandoned their towns and fled 'to the rock in that country called Aornos.'[2] He then proceeds to inform us of the reason why Alexander was filled with the eager desire to capture that rock fastness. His statements on this point, apart from the topographical indications that they contain, are of general interest for the historical student; for they help to throw welcome light on certain psychological factors that undoubtedly played an important part in more than one of Alexander's wonderful enterprises. At the same time those statements furnish a significant illustration of the critical standpoint from which Arrian was apt to view the fabulous element fostered by the hero of his story. This is what he tells us of Aornos (IV. xxviii).

Arrian on Alexander's attack on Aornos.—"This is a mighty mass of rock in that part of the country, and a report is current concerning it that even Herakles, the son of Zeus, had found it to be impregnable. Now whether the Theban, or the Tyrian, or the Egyptian Herakles penetrated so far as to the Indians I can neither positively affirm nor deny, but I incline to think that he did not penetrate so far; for we know how common it is for men when speaking of things that are difficult to magnify the difficulty by declaring that it would baffle even Herakles himself. And in the case of this rock my own conviction is that Herakles was mentioned to make the story of its capture all the more wonderful. The rock is said to have had a circuit of about 200 stadia, and at its lowest elevation a height of 11 stadia. It was ascended by a single path cut by the hand of man, yet difficult. On the summit of the rock there was, it is also said, plenty of pure water which gushed out from a copious spring. There was timber besides, and as much good arable land as required for its cultivation the labour of a thousand men. Alexander on learning these particulars was seized with an ardent desire to capture this mountain also, the story current about Herakles not being the least of the incentives.

We may never know whether the ambition stimulated by such reports about Aornos was the sole incentive that decided Alexander to effect its capture. The decision was probably due quite as much, if not more, to the strategic principle invariably kept in view by Alexander of never leaving an enemy behind him until he had been completely crushed. The latter motive is any-

[1] Cf. *Anabasis*, IV. xxviii.

[2] See above p. 41.

how clearly indicated when in the words immediately following the above passage Arrian tells us: "With this in view he turned Ōra and Massaga into strongholds for guarding the country and strengthened the defences of Bazira."

Alexander's operations in Peshawar Valley.—Then the narrative takes us suddenly south to that division of his army which under Hephaistion and Perdikkas had been sent down the Kābul river to secure the Peshawar valley. Under Alexander's orders they had fortified there a town called Orobatis, for which no satisfactory location has as yet been found; having garrisoned it, they had proceeded to the Indus to bridge it.

That Alexander himself had with the capture of Ōra concluded his campaign in the Swāt valley and moved across the hill range into the Peshawar valley is clear from what follows. He is said to have marched to the Indus and to have received the submission of the city of Peukelaōtis where he placed a Macedonian garrison. This city has long ago been identified with *Pushkalāvatī*, the ancient capital of Gandhāra, close to the present Chārsadda on the Swāt river and north-east of Peshawar. It is wrongly described by Arrian as lying not far from the Indus. The error must warn us as to possible geographical mistakes even in the most reliable of the narratives dealing with Alexander's Indian campaign. We are next told that Alexander "reduced other towns, some small ones, situated on the Indus," while accompanied by two chiefs of this territory; their names, Kothaios and Assagetes, are unmistakably Indian.

Before I proceed to analyze the data we possess concerning the famous 'rock of Aornos', to the siege and conquest of which Arrian's account now immediately turns, it will be convenient briefly to indicate certain considerations of a quasi-geographical order which, I believe, deserve specially to be kept in view when looking for the right identification of that much-discussed site. We have seen that Alexander's operations along the Swāt river must have covered Lower Swāt and that most fertile and populous portion of Upper Swāt which extends to the great bend of the valley near Mingaora above Uḍegrām. We have also learned that after the fall of Ōra, which must certainly be located above Bīr-kōṭ and probably below that bend, all the inhabitants abandoned their towns and fled for safety to 'the rock of Aornos.'

Flight of Assakēnoi to Aornos.—Now if we look at the map and keep in mind the situation created for the Assakēnoi by the Macedonian posts established at Massaga, Ōra and Bazira, it will be clear that the bulk of the fugitive population evacuating the towns farther up the valley could have sought safety neither to the west nor to the south. In the former direction the way was obviously barred by the invaders. To the south as far as it could be reached by routes not commanded by the Macedonian posts guarding the main valley, there lay Bunēr, a country singularly open for the most part and accessible by numerous passes from the side of the Peshawar valley. The plain of the latter had already been reached by the portion of Alexander's army sent down the Kābul river; thus Bunēr, too, lay open to invasion.

Safe lines for general retreat were obviously restricted to the north and east. In the former direction the main Swāt valley continues, as we have seen, remarkably easy and open as far as Churṛai. The same remark applies also to the side valleys opening from it, at least in their lower parts. No safe refuge from invasion, so swift and determined as that of Alexander, could be hoped for there. Higher up where the Swāt river breaks through the narrow gorges of Tōrwāl, invasion would, no doubt, be kept off by the natural difficulties of the ground. But there, just as at the high alpine heads of the valleys which descend to the Swāt river from the snow-covered watersheds towards the Panjkōra and Indus, local resources would have been far too limited for the maintenance of a great host of fugitives. Nor should the great climatic hardships be ignored which those fleeing from the towns of the valley plain would have had to face at the time in those alpine parts of Swāt. We know that the Macedonian invasion must have reached Swāt in the late autumn of 327 B.C., and the rigours of the approaching winter to be faced high up in the mountains would have sufficed to deter any large numbers from seeking safety northward.

Retreat towards Indus.—Conditions were distinctly more favourable to the east. There a number of large and for the most part very fertile valleys comprising the tracts of Ghōrband, Kāna, Chakēsar, Pūran and Mukhozai stretch down to the Indus from the Swāt watershed. They can be reached by several easy passes, none much over 6,000 feet in height. All are throughout the year practicable for laden mules and ponies from the open side valleys which, we have seen, leave the Swāt river at the large villages of Manglawar, Chārbāgh, and Khwāja-khēl, respectively. A single day's march from the riverine plain of Swāt suffices to bring the traveller over any of these passes to the head of the Ghōrband valley, whence access is easy to the rest of those valleys. In addition there are routes from Mingaora, more direct if not quite so easy, connecting that important place in central Swāt with Pūran and Kābalgrām on the Indus.

The advantages which this side would offer for retreat from invaded Swāt are clear enough. By crossing the watershed range towards the Indus the fugitives would place a natural barrier between themselves and the enemy. In the tracts there reached they could count upon finding resources sufficient for their maintenance until the danger had passed.[3] The great distance intervening between those tracts and the Peshawar valley might offer protection from the Macedonian forces in the plain. Finally, having secure access to the Indus, they could easily draw help from across the river when further attack threatened, or else continue their retreat to that side if fresh resistance failed.

Assistance from Hazāra side.—With regard to the last-named advantage there is evidence available from historical facts both ancient and modern. We

[3] The extent of these resources even at the present time is illustrated by the following data ascertained on my passage through Chakēsar and Pūran. Both tracts have suffered severely from protracted local feuds as well as by the heavy fighting which preceded their conquest by the Miāngul in 1923. Yet the revenue in kind paid now to thef ruler of Swāt at the lightly assessed rate of one-tenth of the produce was reckoned at 6,000 maunds of grain for Chakēsar and at about 4,000 maunds for Pūran.

have seen already above that what prompted Alexander to hasten in person to the siege of Ōra was the news of assistance being sent to its defenders by Abisares.[4] It is true that the Abhisāra territory whose king is here meant comprised in later times mainly the lower and middle hill tracts to the east of the Vitastā or Hydaspes, the present Jhelam.[5] But there is good reason to believe that at the time of Alexander's invasion its ruler's power extended also over the hill portion of Uraśā, the present District of Hazāra, east of the Indus.

This is proved by what Arrian tells us of the Indians who after the capture of Aornos had fled from neighbouring parts across the Indus to Abisares, and also by what he subsequently relates of an embassy from Abisares which Arsakes, ruler of an adjacent territory, attended as a feudatory.[6] It has been recognized long ago that by Arsakes the chief of Uraśā is intended, the territory which in Ptolemy's 'Geography' appears under the name of Ἄρσα or Οὔαρσα.[7]

Close relation between Swāt and Hazāra is clearly indicated by the map. This shows us that the above-mentioned tracts of Chakēsar and Ghōrband are faced immediately to the east of the Indus by the comparatively large and open valleys of Nandihār and Allāhī. These are now occupied by Pathān tribes, all here, as also farther down by the Black Mountain, closely linked with those established on the other side of the river. From these valleys easy routes lead to Agrōr and the fertile central plain of Hazāra known as Pakhlī, about Mansehra and Baffa.

Swātīs settled in Hazāra.—This geographical nexus is well illustrated by the fact that the population of this part of Hazāra is largely composed of a tribe known as 'Swātīs,' descended from the pre-Muhammadan inhabitants of the Swāt valley. Historical records and living tradition alike prove them to have been driven out of their original seats by the Pathān invasion of the fifteenth century. The same close relation is reflected also, to come down to very recent times, by the fact that during the several Black Mountain expeditions since the annexation of the Panjāb the various Pathān tribes settled on both the Swāt and the Hazāra sides of the river always took their common share in the fighting.

SECTION ii.—INDICATIONS LEADING TO PĪR-SAR

After this rapid survey of the ground to which the Assakēnoi, the early predecessors of those 'Swātīs,' are likely to have retreated for safety, it will be easier to consider the questions raised by what our extant accounts relate of Alexander's great feat at Aornos. Among them Arrian's record is the fullest and undoubtedly also the most reliable. We may attach to it all the more critical value because one of the two contemporary authorities whose narratives

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4 See Arrian, IV. xxvii, 7; above, pp. 27, 39.

5 Cf. Stein, *Rājataraṅgiṇī* transl., notes on i. 180; v. 217.

6 Cf. Arrian, IV. xxx; V. xxix.

7 For the identification of Ἄρσα and Arsakes, cf. my note on *Rājataraṅgiṇī*, v. 217.

Arrian in his preface declares as more worthy of credit than all the rest, and whom he principally follows, was that Ptolemy, son of Lagos and the first of the Ptolemies of Egypt, who personally had played a chief part in the conquest of Aornos.[1]

Now Arrian tells us, as we have seen, that Alexander, instead of pursuing the fugitive Assakēnoi to their mountain retreat, moved from Swāt into the Peshawar valley. Thereafter resuming contact with that portion of this army which had already arrived by the route of Kābul river, he organized Macedonian control over this important district and then proceeded to the Indus. In view of what has been shown above as to the direction to the east of the Swāt-Indus watershed which the retreat of the inhabitants of Upper Swāt was likely to have taken, it is easy for us to understand the sound strategic reasons underlying what might otherwise seem a needless deflection from an important direct objective.

An attack from the south upon that mountain retreat of the Swāt fugitives by the Indus offered several distinct advantages. Entanglement in a mountainous region where passes and narrow defiles, if defended, might seriously hamper advance would thus be avoided. It would become possible to cut off the fugitive host from retreat into the territory east of the Indus and from such assistance as Abisares, the ruler on that side, might offer. Nor were the facilities likely to be neglected which the Indus valley and convenient access south to the fertile plains of the Peshawar valley would offer in respect of supplies and other resources in case of prolonged operations.

Arrian on Alexander's move towards Aornos.—The importance of the last consideration is clearly indicated by what Arrian tells us immediately after the passage already quoted, which records the reduction of a number of small towns situated on the Indus.

"After he had arrived at Embolima, which town lay not far from the rock of Aornos, he there left Krateros with a portion of the army to collect into the town as much corn as possible and all other requisites for a prolonged stay, in order that the Macedonians having that place as a base might by protracted investment wear out those holding the rock, in case it were not taken at the first assault. He himself taking with him the archers, the Agrianians, the brigade of Koinos, the lightest and best armed from the rest of the phalanx, two hundred of the companion cavalry and hundred mounted archers, marched to the rock. At the end of the day's march he encamped on what he took to be a convenient site. The next day he advanced a little nearer to the rock, and again encamped."

Arrian does not furnish us with any indication as to the position of Embolima. But as the accounts of Curtius and Diodorus agree in placing Aornos on the Indus[2] the town which was to serve as Alexander's base of supplies may with good reason be also looked for on the Indus. This is borne out by Ptolemy's mention of Embolima as a town of Indo-Scythia situated on the Indus, with coordinates corresponding to those which he indicates

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[1] Cf. Arrian, *Anabasis*, Prooemion, where Ptolemy's name significantly meets us as the very first word.

[2] See below, pp. 81 sqq. [Thus also Strabo, XV, p. 688, as pointed out by Prof. U. Wilcken.]

for the confluence of the Indus and Kōa or Kābul river.[3] But as no reliance whatever can be placed on Ptolemy's latitudes and longitudes as far as his map of India is concerned, this does not help us further to determine the exact position of Embolima.[4] Nor can we derive guidance in this respect from the fortunate fact that Professor Sylvian Lévi has discovered references to the same locality in Buddhist texts which mention it under the original Sanskrit form of its name as *Ambulima*;[5] for these texts contain no definite local indications.

Location of Embolima.—When General Abbott in 1854 discussed at great length his location of Aornos on the Mahāban range to the south of Bunēr and Chamla, he proposed to recognize Embolima in the village of Amb, situated on the right bank of the Indus, from which the present semi-independent chief of Tanawal territory in Hazāra takes his title.[6] The identification of Mount Mahāban with Aornos, though generally accepted for many years, proved untenable in the light of what the close examination of the ground, carried out by me in 1904, showed as to the true topographical features of the supposed site.[7] For these could not be reconciled with the plain and comparatively precise indications that are supplied to us by Arrian, as to the character of the natural stronghold and its immediate surroundings.

But a recognition of this fact will not necessarily invalidate the location of Embolima at Amb. Arrian's narrative shows that it took Alexander two marches from Embolima to reach the neighbourhood of Aornos. Hence even if the above location is accepted we may still look for Aornos higher up the Indus, in that area comprising the tracts of Ghōrband, Chakēsar, and Pūran, to which the considerations fully set forth above point as the ground most likely to have been sought by the population retreating from Upper Swāt.

It should, however, be remembered that the identification of Amb with Embolima (Sanskrit Ambulima) rests so far solely on the identity of the modern name with the first syllable of the ancient one, and that the assumed apocope of fully three syllable at the end of the latter is more than can easily be accounted for by the rules governing the phonology of modern Indo-Aryan vernaculars. If Embolima were to be looked for farther up the river the position occupied by Kābalgrām, a large village and a centre of local trade, situated at the point where the river draining the wide and fertile valley of Pūran joins the Indus, might on topographical grounds suggest itself as a likely site.

Colonel Wauhope's suggestion regarding Aornos.—Ever since my visit to Mahāban in the autumn of 1904 had furnished conclusive evidence against

[3] See *Geographia*, VII. i. 27, 57.

[4] More useful, perhaps, is the relative bearing to the south-west of Embolima, which Ptolemy indicates for Asigramma, mentioned by him as another town of Indo-Scythia and as situated on the Indus; for Asigramma can probably be identified with the ruined site of Asgrām situated about 2 miles to the west of the Indus just outside the extreme north-east corner of the Peshawar District; cf. my *Archaeological Survey Report, N. W. F. P.* (Peshawar, 1905), p. 47. But as no value can be claimed for the indication of distance between the two places as deduced from the respective coordinates, no safe conclusion is possible as to the exact position of Embolima.

[5] See S. Lévi, *loc. cit.*, in *Journal Asiatique*, 1915, Janv.-févr., p. 103.

[6] See "Gradus ad Aornon," *J. A. S. B.*, 1854, pp. 338, 344. This identification had been suggested already by M. Court, one of Ranjit Singh's generals; cf. *J. A. S. B.*, 1839, p. 310.

[7] Cf. *Archaeol. Survey Report, N.-W. F. P.* (1905), pp. 28 sqq.

the location of Aornos on that range, I had kept in view "the possibility of our having to look for Aornos higher up the great river."[8] But it was only in 1919 that my attention was drawn in a definite fashion to ground where a likely solution of the problem could be hoped for. The right bank of the Indus and all the adjacent territory to the west of it had, indeed, remained as inaccessible as before. But fortunately work on the maps reproducing the surveys carried out during my three Central-Asian expeditions brought me in 1917-19 into close contact with the late Colonel R. A. Wauhope, R.E., at the Trigonometrical Survey Office, Dehra Dun.

The personal knowledge which this highly accomplished officer of the Survey of India had gained of that ground during the survey work conducted by him on the left bank of the Indus during the Black Mountain expeditions of 1888 and 1891-92 furnished me with a very valuable clue. From high survey stations then established on the Black Mountain range and again during the occupation of the Chagharzai, Nandihār and Allāhī tracts, Colonel Wauhope had ample opportunities for becoming familiar with the general features of the hills on the opposite side of the Indus valley all the way between the Hassanzai country, above Amb, and Chakēsar. Being a sound classical scholar all his life, he was interested in the question of Aornos, and what he had observed at the time had led him to form the belief that a position corresponding to that described by Alexander's historians was more likely to be found on the spurs descending steeply to the Indus opposite Thākōt in Nandihār than anywhere else. But as an experienced topographer he rightly recognized also that a definite location could be hoped for only by close examination on the spot.

The spurs just referred to are the easternmost finger-like offshoots of the range which trends with a due easterly bearing and a total length of close on 20 miles from the Swāt-Indus watershed above Manglawar and Chārbāgh to the Indus. On the opposite side of the river there open the mouths of the Nandihār and Allāhī valleys. From the available Survey of India maps, including Sheet No. 43 B.NE. on the scale of two miles to the inch, it was seen that the range may be roughly described as dividing the valleys of Ghōrband and Chakēsar; that its crest rises to triangulated heights between 9,265 feet in the west and 7,011 feet in the east, and that round its eastern foot the Indus flows in a wide bend. Little else could be made out from the map, based as it necessarily was for this ground on sketches made from a distance, on native route reports and the like.

Information about Pīr-sar.—My first endeavour, made after a rapid visit in 1921 to Agrōr and the Indus banks facing Amb, had been to secure access to the ground just indicated from the tribal territory of Nandihār on the opposite side of the river. But by the time I was able to renew the attempt in 1925 that same ground, together with the rest on the right bank of the Indus down to the Barandu river some 9 miles above Amb, had passed under

[8] See *Archaeol. Survey Report, N.-W. F. P.* (1903), p. 20.

the sway of the ruler of Swāt. The question of giving me access had therefore to be taken up with him by the political authorities of the North-West Fontier Province. The letter communicating his assent indicated the condition that I should visit the tract in question not from across the Indus but from the side of Swāt. At this I had reason to feel specially gratified; for it offered a chance of extending my exploratory work over far more of interesting ground than originally contemplated. From the same letter I learned that the site of Aornos, which had been mentioned as the principal objective of my visit, was locally known by the name of Pīr-sar.

This precise information as to the locality to be looked for was bound to be received by me with surprise; for former experience in this region had shown me that genuine local tradition about Alexander's campaign twenty-two centuries ago survives there as little as it does anywhere else on the North-West Frontier or in the Panjāb. Indeed, none could reasonably be expected considering the great length of time passed, the far-reaching ethnic changes, the ephemeral character of the great Macedonian's passage, and the total absence of any historical recollection concerning him and his invasion in the whole range of Indian literature, as distinct from the 'Alexander romance' introduced in its Persian garb through the Muhammadan conquest.

What I subsequently had occasion to hear from Sipāhsālār Aḥmad 'Alī, the Miāngul's commander-in-chief, who accompanied me throughout my tour, and from others of the ruler's entourage, has confirmed my belief that their connection of Alexander's name with that particular locality of Pīr-sar had originated merely from the way in which the object of my proposed visit had been communicated to the Miāngul in official correspondence and from the interest which had thus been directed towards a site likely to answer the general description conveyed. Nevertheless the apparent precision with which the local inquiry made at the ruler's desire had fixed upon that locality was a moment not to be ignored. This will explain why when the completion of our surveys in Upper Swāt allowed me to turn towards the Indus and to approach there the ground to which Colonel Wauhope had specially drawn my attention, I wished to visit Pīr-sar in the first place.

SECTION iii.—THE SURVEY OF PĪR-SAR

The journey that brought me within a week (April 19-26) from the western foot of the Karōrai pass to the ground indicated by Colonel Wauhope's suggestion as likely to hold the site of Aornos, proved interesting enough. It led first to the northern portion of the Ghōrband tract near where the two main feeders of its river join below the village of Lilaunai; thence across the Shilkhai pass, close on 9,000 feet in height and still snow-covered at the time, to the head of the large side valleys of Kāna. Here under high snowy mountains overlooking still inaccessible portions of the Indus Kohistān it was possible to survey much interesting ground as yet wholly unexplored. But though there was evidence throughout Kāna of much cultivable ground lying untilled, largely owing to the internal feuds which until quite recent years prevailed

here as elsewhere in these hill tracts among the Pathān clans holding them, no remains could be traced beyond walls of ancient appearance supporting cultivation terraces long ago abandoned. Such were found ascending the hill sides above the villages of Bilkānai and Barkāna. The remains above the latter place are known as *Kuch-kandare* and show in places solid masonry distinctly of the Gandhāra type, also ancient potsherds (*see* Kuch., Pl. I).

Move through Kāna and Ghōrband.—By descending the Kāna valley which being open and fertile might in ancient times well have supported a considerable population, the lower course of the Ghōrband river was reached. Along it leads a much frequented route from the Indus to Swāt. It had certainly been followed by Fa-hsien on his way from Darēl to Swāt, and must have seen also other Chinese pilgrims who had made their way down the Indus gorges by that 'difficult, precipitous and dangerous road' Fa-hsien so graphically describes. I thought of the relief with which they all must have greeted the easy track that leads up the Ghōrband valley from the Indus and gives access to the rich land of ancient Uḍḍiyāna.

Almost opposite to the mouth of the Kāna valley there descends a valley from the range before mentioned which extends with a west-easterly trend from near the Swāt watershed to the Indus and divides Ghōr and Chakēsar. Near the head of that valley lies the comparatively large Gujar village of Upal at an elevation of about 4,600 feet, and an easy pass above it forms a convenient connexion between the two tracts, both held now by the Azī-khēl clan. On the morning of April 26th we started on foot from Upal to make our way westwards to Pīr-sar. The greybeards of Upal had reported some 'Kapūr-kandare', 'ruins of Kāfir times', on a little spur to the south of the visible track and some 1,300 feet above it. I therefore soon left the stony ravine in which the long column of baggage-carrying Gujars were moving up towards the crest of the Upal range—as for shortness' sake it may be called—and guided by Maḥmūd, an intelligent Gujar potter, climbed up the steep spur of Chāt.

Remains at Chāt.—The little plateau on its top was found to bear not merely the well-cultivated fields of nearly a dozen Gujar households, but to the south also the remains of a small fort built with walls of unmistakably ancient masonry. These are about 5 feet thick and in places survive to a height of 6 feet. The circumvallation measures 132 feet from N.W. to S.E. and 36 feet across. Fragments of ancient pottery (Pl. I) showing simple raised or incised patterns of the same type as found at the Buddhist sites of Swāt, turned up in plenty around. Immediately below the south-west wall Maḥmūd, our guide, picked up under my eyes the well-preserved bronze bracelet, seen in Plate I. It measures only 2 inches across and shows two snake heads at the ends. The workmanship is too rough to permit an attempt at dating. The discovery was prepared by the rain of the preceding days which had loosened the ground.

The modest reward I gave for this find was meant also as a return for an important piece of information that Maḥmūd had given me. In the course of

our climb up to Chāt I had cautiously questioned him about localities farther east on the Upal range and in particular about the high ridge of Pīr-sar. Maḥmūd knew Pīr-sar well enough, but, of course, was quite unaware that the great Sultān Sikandar had ever come to these parts; nor did my repeated careful enquiries among local Pathāns, Gujars or Mullahs reveal the slightest indication that folk-lore or quasi-learned tradition in this region in any way connected Swāt and the adjacent hill tracts with the exploits of Sikandar, the legendary hero of the 'Alexander romance' in its Muhammadan version.

Ascent to Mount Ūṇa.—But in the course of my talk with Maḥmūd I heard for the first time the name of *Ūṇa-sar*, or 'Mount Ūṇa', mentioned. It was believed by all people, so he said, to be highest peak on the range that stretches from the pass above Upal to the Indus, and just below it in the direction of the great river lay Pīr-sar, a big alp cherished by the local Gujars both for grazing and cultivation. It was easy for me to realise that *Ūṇa*, pronounced with that cerebral *ṇ* which represents a nasal affected by a preceding or following *r*, might well be the direct phonetic derivative from the Dardic or Indo-Aryan name that Greek tongues had endeavoured to reproduce by *Aornos*. But such philological indications could carry weight only if the actual topographical conditions as Pīr-sar were found to agree with such data as can be gathered about Aornos from reliable sources.

An ascent of about 1,800 feet, first over terraced fields and then up slopes clothed with luxuriant conifer and Ilex forest (Fig. 50) brought us from Chāt to the crest of the range. Along this crest, very narrow and rocky throughout, or on the steep southern slope close below it, led the track, such as it was, eastwards (*see* Map of 'Pīr-sar and Environs', 2 miles to the inch). Fine views had been obtained before of the great glacier-clad peaks above the Swāt river headwaters, and on passing below the top of the eminence, shown with the triangulated height of 8,439 feet on the map and known as Acharo-sar, there was sighted through the pines and firs the Indus valley below and the long snow-topped range of the Black Mountain beyond it. Past a very fine spring issuing below Acharo-sar we reached soon the open top of a side spur which lower down bears the grazing plot known as 'Little Ūṇa'.

From this point there came into view the bare rocky peak of *Ūṇa-sar*, or 'Mount Ūṇa' (shown on the map with the triangulated height of 8,721 feet), and stretching away from it southward I sighted the flat-topped ridge of Pīr-sar. It was a very striking sight, this long and almost level ridge, as it rose there, girt all round with cliffs, above the precipitous smaller spurs and steep ravines which were seen to run down to the Indus some 5,000 feet below (Fig. 48). At its northern end it was seen to slope down from a steep tree-clad hill, and this from where we stood, about two miles off to the west, appeared to join up with the main crest of the range as it continues to the east of Ūṇa-sar.

Approach to Pīr-sar.—Pīr-sar seemed near enough as I looked across the deep valley flanked by precipitous slopes which separated us from it; but in the end it took us nearly three hours more to reach it. First we had to make

our way past the steep southern face of Mount Ūṇa, and as lower down this falls away with sheer walls of rock, to ascend by a troublesome track to within 200 feet or so below the summit. Then it became possible to cross to the northern slope of the crest, steep too, but well timbered, and thus to descend to the small tree-girt alp of Būrimār (Fig. 46), where we found some summer huts of Gujar graziers and the fenced-in resting place of some Muhammadan saint.

At first Būrimār seemed to link up with the wooded conical height marking the northern end of Pīr-sar. But when the lower edge of the gently sloping alp was reached I noticed with some dismay at the time, I confess, that a deep and precipitous ravine previously masked by close tree growth still separated us from that height. The descent to its bottom, which, as careful aneroid observations on two separate occasions showed, lay fully 600 feet lower, was very fatiguing owing to the steepness of the slope and the slippery nature of the ground. When the bottom of the gully was at last reached in the gathering dusk it proved to be a very confined saddle, less than 40 yards long and only about 10 yards across. Fallen trees encumbered the saddle and lay thickly also in the narrow ravines descending on either side.

Progress was trying too, along the precipitous cliffs lining the south-western slopes of *Bar-sar* ('the top hill'), as the northern end of the Pīr-sar ridge is known. It was with real relief that at last long after nightfall level ground was reached where the flat portion of the top adjoins Bar-sar. It was a strange sensation to pass for close on a mile along what the full moon shining under a cloudless sky showed to be verdant fields of young wheat. Then camp was pitched near a rudely built mosque, at an elevation which subsequent observations with the clinometer proved to be fully 7,100 feet above sea-level.

Survey of Pīr-sar spur.—I have thought it expedient to describe the march which brought us to Pīr-sar in some detail, because it may help to visualize better those topographical features which lead me to believe that this remarkable ridge represents the long sought-for site of Aornos. For the same reason I may proceed at once to record the observations gathered by a careful examination of the ridge and the surrounding ground in the course of a three days' stay. Reference to the Map of 'Pīr-sar and Environs', from the plane-table survey on the scale of 4 inches to 1 mile made by Surveyor Tōrabāz Khan under my direct supervision, will best help to illustrate them.

Pīr-sar is but one of a series of narrow spurs which the range stretching from Upal throws out south towards the Indus, before it drops rapidly in height beyond the Bēnamāz spur. There it flattens out fan-like towards the low plateau of Maira, washed at its foot by the Indus. Of these spurs Pīr-sar preserves its height farthest, and owing to the uniform level and the very fertile soil of its top, affords most scope both for cultivation and grazing. The practically level portion of the top extends at an average elevation of about 7,100 feet for close on 1½ miles. At its upper end this flat portion is adjoined for some distance by gentle slopes equally suited for such use (Fig. 53).

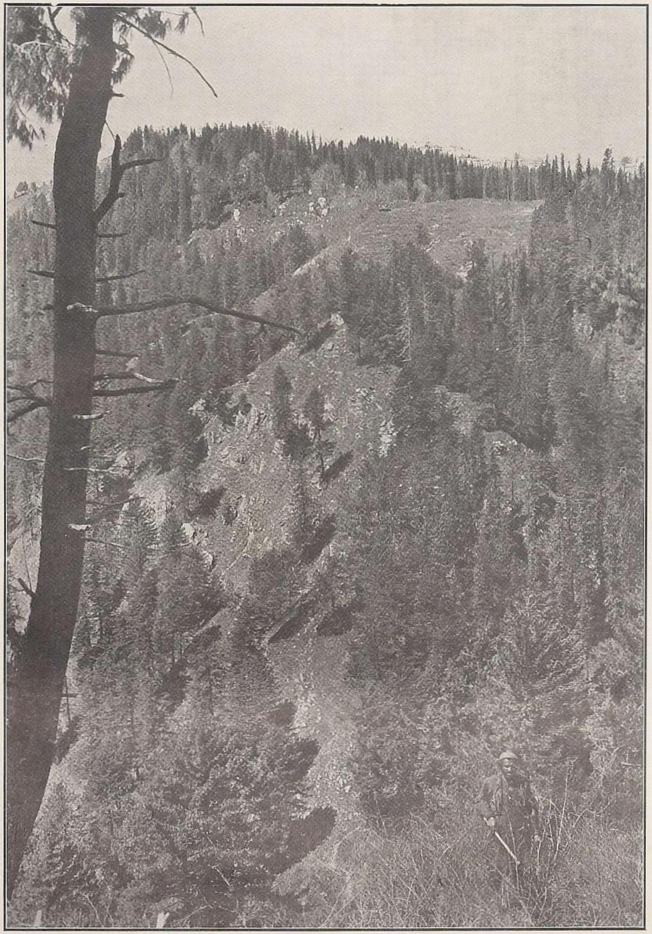

Fig. 46. Būrimār alp and slope down to Būrimār-kandao, seen from Māshlun.

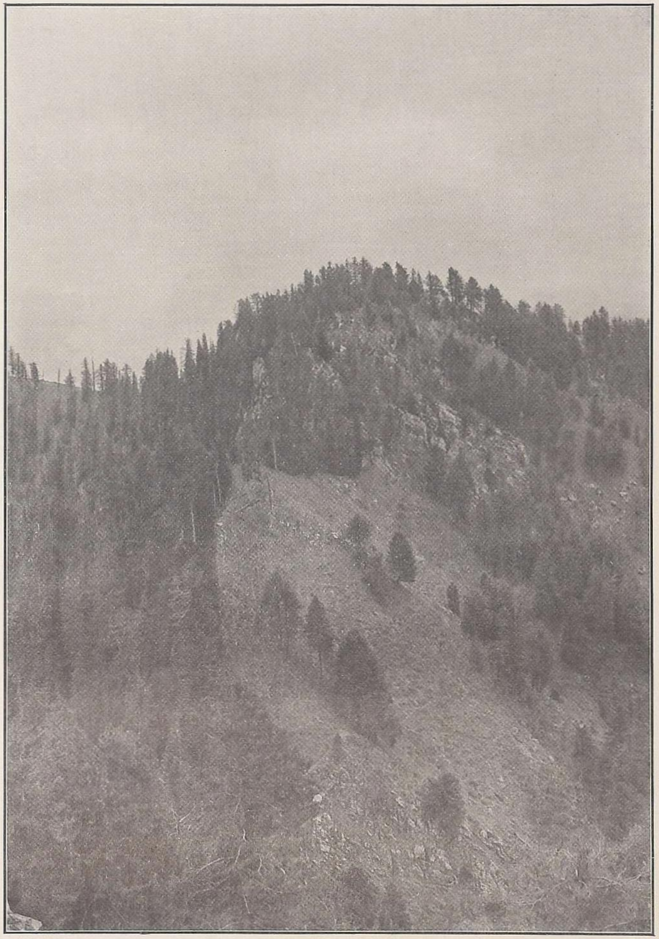

Fig. 47. Māshlun shoulder and Bar-sar cliffs above, seen from below Būrimār.

Dominating position of Pīr-sar.—Owing to its greater height and the depth of the valleys on either side Pīr-sar forms a dominating position; overlooking all the other spurs, it offers an exceptionally wide and impressive view. This comprises the whole of the Indus valley from below the Mahāban range in the south to where the winding course of the great river lies hidden between closely packed spurs descending from the high snowy ranges towards Kāghān and the Swāt river headwaters (Fig. 57). To give some idea of the extent of the vast panorama commanded from Pīr-sar, it must suffice here to mention that it includes northward the great ice-crowned peaks above Tōrwāl, Dubēr, and Kandia, and to the east all the ranges which adjoin the central part of Hazāra. Southward the plain of the Peshawar valley above Attock could be distinctly sighted.

The spur from its level top, to which the name Pīr-sar, 'the holy man's height', is properly applied, falls away both on the east and west with very steep rocky slopes. In places these form sheer cliffs, while in others pines and firs have managed to secure a footing. The southern end of Pīr-sar rises into a small but conspicuous hillock, known as *Kuz-sar*, 'the lower height', as opposed to the Bar-sar at the northern end. There the spur divides into three narrow branches, all flanked by precipitous rocky slopes (Fig. 54). The crest of the middle one is in its upper portion so steep and narrow as to be practically inaccessible. That of the eastern branch, known as *Ashārai*, is very narrow too, but bears some knolls which afford room for small patches of terraced cultivation. The shortest branch, called *Māju*, which juts out like a bastion to the south-west, also bears two such small patches on its crest, before it terminates in sheer cliffs at a level about 1,200 feet below the top of Pīr-sar.

Ravines below Pīr-sar.—The western slopes of Pīr-sar descend steeply for some 2,000 feet into a very confined valley (Fig. 49). This in parts of its bottom is an impracticable ravine, while in others little terraces bear a few scattered fields. On the opposite side of the valley there rises with formidable bare cliffs, almost perpendicular in places, the small spur of *Balai*. There are short stretches of more gentle slope on its top used for summer grazing; but these are practically accessible only from the crest of the main range just below the Ūṇa-sar.

A deep ravine divides the spur of Balai westwards from another and much longer one, known to the local Gujars as Danda-Nūrdai. This separates from the main range near the grazing-grounds of Landai and farther down faces the south-western slopes of Pīr-sar. Its narrow serrated crest is crossed by two passes. The lower one, called *Pēzal-kandao*, at an elevation of about 4,621 feet, gives access to a portion of the valley where opposite to the cliffs of Māju some cultivation is carried on by the scattered homesteads of the Gujar hamlet of Tālun. From below the Pēzal-kandao it is possible to ascend by a difficult track to the crest of the Māju spur, and thence to the southern end of Pīr-sar. Across the other pass, about 6,471 feet above sea-level, a somewhat easier route leads from the valley behind the Danda-Nūrdai spur

to the grassy slopes below the alp of Little Ūṇa, and thence joins the track passing along the top of the main range. We shall see below that these passes may claim some interest in connection with the proposed location of Aornos on Pīr-sar.

From here we must turn back to Pīr-sar to acquaint ourselves rapidly with the ground which adjoins eastwards. It differs in some aspects from that observed to the west owing mainly to the fact that the range, after throwing off to the south the commanding spur of Pīr-sar, very soon falls off in height and becomes bare of tree growth. The drainage descending here from it does not flow south in well-defined separate valleys, but gathering in one wide trough takes its course to the Indus south-eastwards.

Between the deeply eroded Nullahs which join this trough there rises a succession of short knolls and ridges. All have very steep slopes, but are crowned by little plateaus which as seen from Pīr-sar (Fig. 52) give them an appearance curiously suggestive of small detached islands. Most of these little hilltops bear patches of cultivation; but all are devoid of trees and water, and only capable of temporary occupation. The slopes of Pīr-sar facing east descend also very steeply. About 1,500 feet below the middle of the spur they become somewhat easier and here allow room for the small hamlet of Chīr, permanently tenanted by about a dozen of Gujar households. But as its terraced fields occupy the angle between two deep-cut ravines, with rocky scarps descending precipitously for some 500 feet, access to Pīr-sar is made very difficult from this side too.

Top of Pīr-sar spur.—There still remains to be described briefly the top of the Pīr-sar spur. This presents itself for a distance of close on 1½ miles as an almost level plateau, occupied along practically its whole length by fields of wheat. The width of the flat ground on the top varies from about 160 to 200 yards, with strips available for grazing by the side of the fields. Fine old trees form small groves in places (Fig. 56), and one of these near the middle of the ridge shelters a much-frequented Ziārat. There are several small springs in the little gullies which furrow the steep slopes close below the ridge, and these feed the streams which pass near the fields of Chīr or drain into the valley above Tālun. But in addition two large reservoirs, as shown in the map, have been constructed with 'bands' of rough stonework in order to store plentiful water from rain or melting snow, and thus to meet the need of the herds of cattle brought for grazing during the summer months. We found them filled to a depth of several feet.

Over two dozen of homesteads, roughly built in the Gujar fashion, and scattered in groups over the plateau, serve to shelter the families which move up from Chīr and Tālun with their cattle and occupy Pīr-sar from the latter portion of spring till the autumn. The mosque to be referred to below forms the centre of the settlement. As the Pīr-sar ridge stretches from north to south and is nowhere shaded by higher ground its top receives abundance of sunshine. Hence it gets clear of snow very early in the year. This explains also why, in spite of an abnormally late spring and the bitterly cold winds

FIG. 48. PĪR-SAR RIDGE SEEN FROM SOUTH-WEST SLOPE OF ŪṆA-SAR PEAK.

FIG. 49. WESTERN SLOPES OF PĪR-SAR SEEN FROM MĀSHLUN.

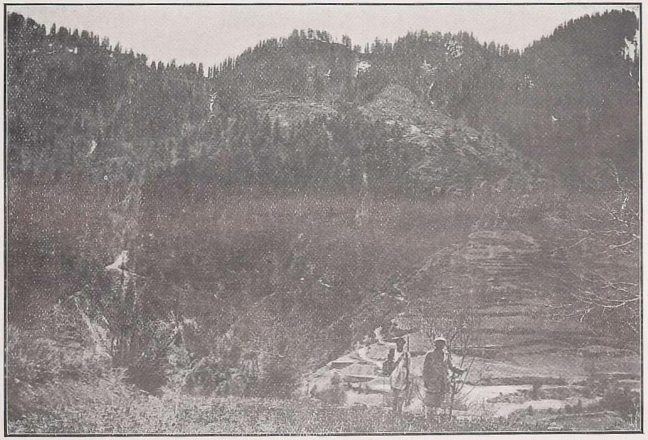

FIG. 50. CREST OF UPAL RANGE SEEN FROM CHĀT.

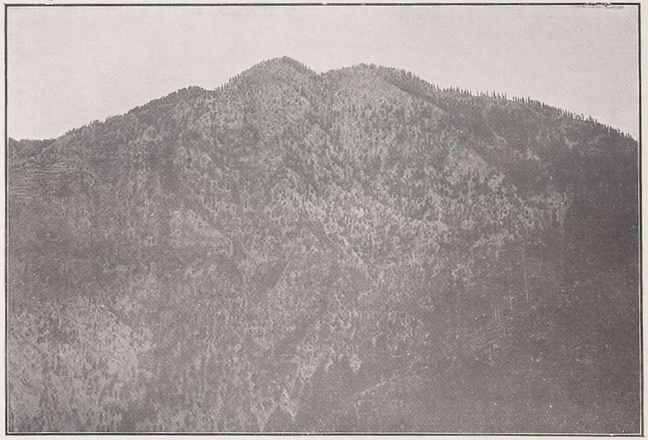

FIG. 51. ŪṆA-SAR PEAK SEEN FROM KUZ-SAR.
'Little Ūṇa' and Achar alps on slopes to left; Balai on spur below them; Būrimār on right.

still blowing down from the Indus Kohistān at the time of our stay (April 27-29), we found the wheat already standing high.

Hill of Bar-sar.—At its southern end Pīr-sar is guarded, as it were, by the hill of Kuz-sar already mentioned, which rises about 100 feet above the plateau and completely commands the difficult paths leading up from the Māju and Ashārai crests. At the northern extremity the plateau is still more effectively protected by the bold conical hill of Bar-sar, which rises to a height of about 7,970 feet, and is thus on its top about 800 feet higher than the plateau. The approach from the latter to the thickly wooded top lies first over easy grassy slopes (Fig. 53), but from about 300 feet below it becomes very steep and rocky. The top portion of Bar-sar, as the map shows, has a distinctly triangular shape. The sides of the triangle to the east and south-west are lined with crags and very precipitous. The same is the case with the side facing north-west. From the angle pointing north there leads an easier slope down 200 feet to a narrow saddle, and beyond it there rises close by a small flat-topped outlier of Bar-sar known as *Lānde-sar* ('the lower height'). Its elevation is but little less than that of Bar-sar, and the slopes below it are very steep and rocky on all sides except where the saddle links it with Bar-sar.

Shoulder of Māshlun.—At the angle pointing west Bar-sar joins up with the main range, in the axial line of which it lies. But it is just here that the continuity of the range is broken by the deep and precipitous ravine which we encountered on our first approach to Pīr-sar. The bottom of this ravine lies approximately on the same level as the plateau of Pīr-sar and about 600 feet below the alp of Būrimār which, as we have seen, faces Bar-sar. I have already described the troublesome descent from Būrimār to the bottom of this ravine known as Būrimār-kandao. But the angle at which the narrow rocky arête from the top of Bar-sar runs down to it is still steeper. The succession of crags, in places almost vertical, is here, however, broken at one point by a projecting small shoulder, called *Māshlun* (Fig. 47). This, visible in the distance in Fig. 53, is quite flat on its top and extends for about half a furlong westwards, with a width of some 30 yards at its end. Trees grow on it thickly just as on the rocky slopes above and below, too. This shoulder of Māshlun juts out at a height of about 540 feet above the bottom of the ravine, and behind it precipitous cliffs rise for another 330 feet or so higher to the summit of Bar-sar. I shall have to recur further on to the remains of an ancient fort traceable on this summit, and to the important topographical indication presented by the shoulder of Māshlun.

Military strength of Pīr-sar.—Having now described the actual configuration of Pīr-sar, I may briefly sum up the essential features which were bound to invest it with exceptional advantages as a place of safety and natural stronghold for the ancient inhabitants of this region. Its great elevation, more than 5,000 feet above the Indus, would suffice to make attack difficult. The extent of level space on its top, greater than that to be found on any height of equal natural strength further down on the right bank of the Indus, would permit of the collection of large numbers both for safety and for

defence. Its central position would make Pīr-sar a particularly convenient place of rally for large and fertile hill tracts such as Chakēsar, Ghōrband and Kāna, as well as for that portion of the Indus valley lying close below where the space available for cultivation is wide and villages accordingly large and numerous.

The great height and steepness of the slopes with which Pīr-sar is girt would suffice to make its defence easy in times when those fighting from superior height had every physical advantage on their side. And in this respect full account must also be taken of the fact that even on the side where the spur is adjoined and overlooked by the main range, it is isolated by the deep ravine of the Būrimār-kandao. Finally attention is due to the great strategic strength of the general position; for as the map shows over two-thirds of it are protected by the great bend of the Indus.

SECTION iv.—ALEXANDER'S SIEGE OF AORNOS

Having now acquainted ourselves with the topographical features of Pīr-sar we may turn back to the record of Alexander's operations where we left it on his arrival in the vicinity of Aornos. Arrian's description of them is so clear and instructive in its topographical details that it appears best to reproduce it here *in extenso*.[1] I give it in Mr. M'Crindle's translation, with a few slight alterations which reference to the original text seems to me to render necessary.

Arrian's account of operations against Aornos.—" Some men thereupon who belonged to the neighbourhood came to him, and after proffering their submission undertook to guide him to the place most suited for an attack upon the rock, that from which it would not be difficult to capture the place. With these men he sent Ptolemy, the son of Lagos, and a member of the bodyguard, leading the Agrianians and the other light-armed troops and the selected hyspaspists and directed him, on securing the position, to hold it with a strong guard and signal to him when he had occupied it. Ptolemy following a route which was trying and difficult, secured the position without being perceived by the barbarians. He fortified this all round with a palisade and a trench, and then raised a beacon on that part of the mountain from which it could be seen by Alexander. The signal fire was seen, and next day Alexander moved forward with his army, but as the barbarians offered valiant opposition, he could do nothing more owing to the difficulty nature of the ground. When the barbarians perceived that Alexander had found an attack (on that side) to be impracticable, they turned round and attacked Ptolemy's men. Between these and the Macedonians hard fighting ensued, the Indians making strenuous efforts to destroy the palisade and Ptolemy to hold the position. The barbarians had the worse in the skirmish, and when night fell withdrew.

From the Indian deserters Alexander selected one who knew the country and could otherwise be trusted, and sent him by night to Ptolemy with a letter importing that when he himself assailed the rock, Ptolemy should not content himself with holding his position but should fall upon the barbarians on the mountain, so that the Indians, being attacked on both sides, might be perplexed how at act. Alexander, starting at daybreak from his camp, led his army to that approach by which Ptolemy had ascended unobserved, being convinced that if he forced a passage

[1] Cf. *Anabasis,* IV. xxix, xxx.

Fig. 52. Ridges of Dratserge and Bēnamāz seen from Lānde-sar.

Fig. 53. Northern end of Pīr-sar ridge with bar-sar and Lānde-sar above. Swāt-Indus watershed in distance.

On left is seen Māshlun shoulder; view on right extends across Dratserge and Ghōrband valley.

that way and affected a junction with Ptolemy's men, the work still before him would not be difficult. And so it turned out; for up to mid-day there continued to be hard fighting between the Indians and Macedonians, the latter forcing their way up while the former plied them with missiles as they ascended. But as the Macedonians did not slacken their efforts, others succeeding to others, while those (before) in advance rested, they gained with trouble the pass in the afternoon and joined Ptolemy's men. The troops being now all united were thence put again in motion towards the rock itself; but an assault upon it was still impracticable. So came the day to its end.

Next day at dawn he ordered the soldiers to cut a hundred stakes per man. When the stakes had been cut he began from the top of the height on which they were encamped, to pile up towards the rock a great mound, whence he thought it would be possible for arrows and for missiles shot from engines to reach the defenders. Every one took part in the work, helping to pile up the mound. He himself was present to superintend, commanding those that with eagerness advanced the work, and chastising any one that at the moment was idling.

The army on that first day extended the mound the length of a stadion. On the following day the slingers, by slinging stones at the Indians from the mound just constructed, and the bolts shot from the engines drove back the sallies made by the Indians on those engaged upon the mound. The work of piling it up went on for three days, without intermission. On the fourth day a few Macedonians had forced their way to and secured a small hillock level with the rock. Alexander without ever resting drove the mound forward, intending to join the mound to the hillock which the handful of men already held for him.

But the Indians, terror-struck at the unheard-of audacity of the Macedonians who had forced their way to the hillock, and on seeing the mound already connected with it, abstained from further resistance, and sending their herald to Alexander, professed their willingness to surrender the rock if he would treat for peace with them. But the purpose they had in view was to consume the day in spinning out negotiations, and to disperse by night to their several homes. When Alexander perceived this he gave them time to start off as well as to withdraw the round of sentries everywhere. He himself remained quiet until they began their retreat; and then he took with him seven hundred of the bodyguard and of the hypaspists and was the first to scale the rock where it had been abandoned. The Macedonians climbed up after him, pulling one another up, some at one place, some at another. And then at a preconcerted signal they turned upon the retreating barbarians and slew many of them in the flight; some others retreating in terror flung themselves down the precipices and died. Alexander thus became master of the rock which had baffled Heracles himself."

Accounts of Diodorus.—With this clear, sober, and full record of Arrian the accounts given by Diodorus and Curtius agree in all essential topographical points. That both these authors used common sources here as elsewhere also, is evident from various indications. But Diodorus contents himself with a much condensed abstract, and Curtius' narrative owes its greater length mainly to his usual expansion of such minor aspects of the story as specially lend themselves to rhetorical treatment. It will therefore be sufficient, in the case of either account, to note only those points which have a bearing on the location of Aornos.

Diodorus describes the 'rock' as a natural stronghold, 100 stadia in circumference, 16 stadia in height, and with a level surface forming a complete circle.[2] The Indus washed its foot on the south; elsewhere it was surrounded

[2] Cf. Diodorus, *Bibliotheca*, XVII. lxxxv; M'Crindle, *Invasion of India*, p. 271.

by deep ravines and inaccessible cliffs. An old man familiar with the neighbourhood promised against a reward to take Alexander up the difficult ascent to a position which would command the barbarians in occupation of the rock. Following his guidance, Alexander first seized the pass leading to the rock, and as there was no other exit from it, blocked up the barbarians. He then filled up the ravine which lay at the foot of the rock with a mound and getting thus nearer vigorously pushed the siege by assaults made for seven days and nights without intermission. At first the barbarians had the advantage owing to the greater height of their position. But when the mound was completed and catapults and other engines had been brought into action, the Indians were struck with despair and escaped from the rock at night by the pass from which Alexander had on purpose withdrawn the guard he had left there. Thus Alexander secured the rock without risk.

Curtius' description of siege.—Curtius in his description of the rock (*petra*), which he calls by the name of *Aornis*, does not give any dimensions but mentions that the Indus, deep and confined between steep banks, washed its foot.[3] Elsewhere there were ravines and craggy precipices. In rhetorical style, apparently inspired by a reminiscence from Livy, Curtius likens "the rock" to the meta of the Roman circus, "which has a wide base, tapers off in ascending, and terminates in a sharp pinnacle".[4] This description, if it is based on some passage of his original source, would suggest that one portion of the 'rock' rose into a steep conical point. We are told that under the guidance of an old man from the neighbourhood a light-armed detachment was sent ahead by a detour to occupy the highest summit unobserved by the enemy.[5]

Curtius next relates that in order to make an assault practicable a ravine was being filled up with a mound. For this the trees of a forest close at hand were cut down and their trunks, stripped of branches and leaves, thrown in. Within the seventh day the hollows had been filled. An assault up the steep slopes by the archers and Agriani was then ordered. Thirty selected youths from among the king's pages under Charus and Alexander formed the forlorn hope. In the highly rhetorical description which follows it is, however, the king himself who is said to have put himself at the head of the assault. Many are said to have perished, falling from the steep crags into the river which flowed below, "since the barbarians rolled down huge stones upon those climbing up, and such as were struck by them fell headlong from their insecure and slippery footing". We are then told in lengthy poetical words of the death of the two leaders, Charus and Alexander, who had got up high enough to engage in a hand-to-hand fight, but were overpowered and fell. The king, affected

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[3] Cf. *Historiæ*, VIII, xi.

[4] See M'Crindle, *loc. cit.*, p. 197, referring to Livy, Bk. XXXVII. xxvii.

[5] As the leader of the detachment is mentioned Mylleas (or Mullinus), the king's secretary; neither form of the name is otherwise known. The substitution of his name for that of Ptolemy shows that Curtius follows here a source distinct from that of Arrian.

by these losses, then ordered the retreat, which was carried out in an orderly fashion.

Alexander, though resolved to abandon the enterprise, yet made demonstrations of continuing the siege. Thereupon the Indians, with a show of confidence and even triumph, feasted for two days and two nights, but on the third abandoned the 'rock'. When their retirement was discovered, the king ordered his troops to raise a general shout. This struck such terror into the fugitives that many "flinging themselves headlong over the slippery rock and precipices" were killed or were left behind injured.

Topographical indications about Aornos.—The three accounts translated or analysed above are the only ones which have come down to us furnishing any specific data about Aornos. From their comparison we can deduce the following definite indications as regards the locality intended. Aornos was a natural stronghold, situated on a mountain of great height, which precipitous rocky slopes and deep-cut valleys below rendered capable of easy defence against an aggressor. It is important to note that no mention is made anywhere of fortification by the hand of man. There was sufficient level space on the top to permit of considerable numbers finding there a safe refuge. The site was near to the Indus, which flowed at its foot[6]. Its relative height must have been very striking to account for the definite measurements of 11 and 16 stadia, respectively, which Arrian and Diodorus record, approximately corresponding to 6,600 or 9,600 feet. In the same way the circuits of 200 and 100 stadia respectively which these two authors mention, approximately corresponding to 22 or 11 miles, can obviously apply only to a mountain massif or range and not to a single hill or peak.

That Aornos was situated on such a massif or range is in fact made perfectly clear by what all three authors relate of the commanding height attacked by the Macedonians before the start of the siege and reached after an arduous ascent. Both Arrian and Curtius state that the march by which the light-armed detachment sent ahead by Alexander secured this position under local guidance remained unobserved by the enemy. This distinctly suggests that the route followed to that commanding height led up a valley which was hidden from the view of the defenders of Aornos.

Height occupied by Ptolemy.—This assumption finds strong support in Arrian's reference to the pass (πάροδος) to which Alexander, when subsequently following the same difficult route, had to ascend amidst severe fighting before he could join Ptolemy's detachment holding the position above Aornos. Incidentally the opposition here encountered by Alexander indicates that this route leading to the height of the range, though not visible from Aornos and hence not obstructed on the first occasion, was yet accessible to its defenders without their having first to dislodge the detachment on the height. We

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[6] Both Diodorus and Curtius [also Strabo, XV, p. 688; see above p. 70, note 2] definitely mention this point, and Arrian's silence does in no way contradict it. On the other hand, no weight can attach to the statement in Curtius' highly coloured description of the siege, which makes those who lost their foothold in scaling the 'rock' from the ravine fall into the river; for the possibility of this is manifestly excluded by his comparison of the rock with a meta "which has a wide base, tapers off in ascending", etc.

see from Arrian that an attempt to dislodge it had in fact been made on the preceding day but had failed.

We come now to the most significant among the topographical features recorded in connection with Alexander's siege of Aornos. I mean the deep ravine separating the heights on which the Macedonian camp stood from the nearest part of the 'rock'. Here, too, Arrian's account is the fullest and clearest. It shows us that the primary object for which Alexander had to resort to the expedient of constructing a great mound across this ravine was to bring the opposite slope held by the enemy within effective range of what by an anachronism might be called his troops' small arms and field artillery. The precipitous nature of that slope would lend itself to easy and most effective defence, in particular by means of large stones rolled down, a formidable method of defence the actual use of which Curtius here specially mentions.[7] No assault could succeed here until "it would be possible for arrows and for missiles shot from engines to reach the defenders".

Mound constructed across ravine.—We obtain some indication of the great width of the ravine, and indirectly also of its depth, from Arrian's statements concerning the construction of this mound. By the united efforts of the troops it was extended on the first day the length of a station, *i.e.*, circ. 600 feet. After this it became possible for slingers posted on the mound and for shots from the engines to drive back sallies made against those engaged upon the mound. But "the work of piling it up went on for three days without intermission", before an assault made on the fourth enabled a handful of Macedonians to establish themselves on "a small hillock level with the rock".

Yet even after this, we are told by Arrian, the construction of the mound was continued until it was joined up with the position thus gained.[8] This position must have lain still considerably below the crest of the height which faced the ravine from the side of the 'rock'. Thus only is it possible to account for the stiff climb which it cost Alexander and this selected 700 men to reach the top and fall upon the retreating barbarians during the night following their offer of surrender.

SECTION v.—AORNOS LOCATED AT PĪR-SAR

The results of our survey as recorded in the map and in the preceding description make it easy to trace in the local features and its environs all the topographical details of Aornos as presented in the accounts of Alexander's siege. Taking the general features first, we see from the map that the Indus flows in a wide bend round that eastern extremity of the range of which Pīr-sar spur is the largest and most conspicuous offshoot. Diodorus' more

[7] The results which may be obtained by this means of defence on alpine ground, were strikingly illustrated by the achievement of the valiant bands of Tyrolese peasants who successfully defended their country in 1809 against invasion by Napoleon's French and Bavarian troops.

[8] This notice of Arrian about the continued extension of the mound disposes of the apparent discrepancy which certain commentators have found between his account and that of Diodorus and Curtius, who mention seven days as the time taken over the construction of the mound.

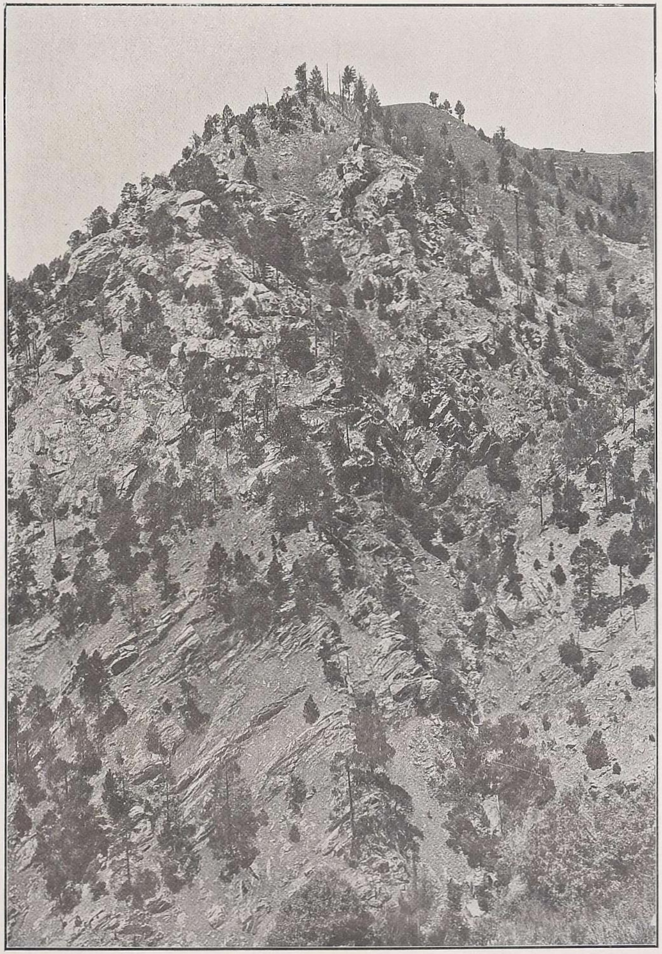

Fig. 54. Cliffs below Kuz-sar end of Pīr-sar seen from Ashārai ridge.

Fig. 55. Southern foot of ruined Stūpa in Tōp-dara, Gōkand.

specific statement that the Indus washed the rock on its southern side is borne out by the map. This shows that the portion of this bend nearest for those coming up the Indus valley lies due south of Pīr-sar.

Elevation of Aornos.—The relative elevation of Bar-sar at the northern end of the spur (7,970 feet by clinometer), if measured from the bank of the Indus (circ. 1,700 feet at Thākōt) agrees remarkably well with the height of Aornos, 11 stadia or about 6,600 feet, as recorded by Arrian.[1] If the relative height of the Ūṇa peak (8,721 feet above sea-level by triangulation) rising immediately to the west of Bar-sar is taken, the agreement becomes, if anything, still closer. Obviously no such test can be applied to the measurement of the circuit; for we do not know on what lines or on which level it was taken. It is curious to note that if a map measurer is passed round the foot of the eastern extremity of the range from near Sarkul on the Indus past the Takhta pass to Shand and thence back again behind the Ūṇa peak we get a total direct length of some 22 miles. But, of course, other measurements, greater or lesser, would also be possible.

Coming next to the commanding height near Aornos which a light-armed force was sent ahead under Ptolemy to occupy, it is clear that the small plateaus on either flank of Mount Ūṇa would exactly answer the purpose in view. This was to secure a position on that side from which the 'rock' was most assailable. Taking into account all the tactical advantages which the possession of higher ground must have implied for the assailant, in times before the invention of long-range fire arms even more than since, there can be no doubt that the side whence an attack upon the rock-girt plateau of Pīr-sar would offer most chances of success would be where the spur joined on, and was overlooked by, the main range. This is the Būrimār plateau on the eastern shoulder of the culminating peak of Ūṇa (Fig. 46).

Route to Ūṇa-sar.—But there are considerations which make me inclined to favour the gently sloping alp of 'Little Ūṇa' immediately below the western flank of Ūṇa-sar as the most likely site of Ptolemy's fortified encampment. From here it was easier to guard the route leading up from the river, and thus to give that assistance for the subsequent ascent of the main force which Arrian's account shows to have become indispensable once the defenders had discovered the Macedonian move. 'Little Ūṇa' offers also the advantage, anyhow nowadays, of easier access to water, and by its situation it was less exposed to attack from the enemy's main position on Pīr-sar.

The route by which the crest of the range where it overlooks Pīr-sar could best be gained from the river certainly led up the valley to the west of the Danda-Nūrdai spur, and thence from its head to 'Little Ūṇa'. The information collected by me showed that this route is considered the easiest from that side for reaching the grazing-grounds on the top of the main range. It is

[1] Bar-sar as well as the rest of Pīr-sar is visible from more than one point of the right bank of the Indus between Sarkul and Gunāghar. It is obvious that the height measurement recorded by Arrian must be a relative one, and that the river bank can reasonably be supposed to have been the place from which it was taken. A height measurement of this kind from a convenient base is a simple geometrical task, and Greek surveying knowledge at the time of Alexander was fully equal to it.

regularly used by the local Gujars when moving there from their hamlets above the Indus. The ascent in the valley is undoubtedly steep, but its bottom is less confined than that of the valley on the other side of the Danda-Nūrdai spur towards Pīr-sar. Near the head of the valley the pass shown in the map with a clinometrical height of 6,471 feet gives access to the lower slopes of Little Ūṇa, and from these the alps occupied by the Gujar huts of Achar and Little Ūṇa can be gained without difficulty.

Ptolemy's move to commanding height.—It is the route just described which for the reasons indicated I believe to have been followed first by Ptolemy and then also by Alexander's main column. Arrian tells us that after Alexander, had seen the beacon lit by Ptolemy on the mountain he had occupied, he next day moved forward with his troops, but as his progress was obstructed by the barbarians, "he could do nothing more on account of the difficult nature of the ground". A look at the map explains how easy it was for the enemy collected on Pīr-sar to obstruct Alexander's march in that valley once Ptolemy's preceding move had been discovered and had indicated the direction which Alexander's attack was likely to take. The valley west of the Danda-Nūrdai spur is within easy reach from the south-western outlier of Pīr-sar across the heights above the pass known as Pēzal-kandao, 4,620 feet above sea-level. By crowning these heights the enemy could seriously interfere with the Macedonians' move up the valley without risking a battle in the open. It was equally easy for them when Alexander's advance up the valley had been brought to a standstill to turn round and moving higher up to attack Ptolemy's detachment holding the fortified camp which, we have seen, may be placed at or near Little Ūṇa.

This attack was beaten off, and when Alexander on the next day resumed his advance up the valley, the Indians who contested it were attacked in the rear by Ptolemy, to whom Alexander during the night had managed to send orders to this effect, as recorded by Arrian. The importance of this help, as well as the difficulties encountered by Alexander, can be well understood by looking at the map. Not until the pass marked there with the height of 6,471 feet had been taken could the junction with Ptolemy's force be effected, and considering its elevation and the steepness of the Danda-Nūrdai spur, Arrian's description of the severe struggle it cost to gain this pass (πάροδος) cannot have been exaggerated.

Once the Macedonian forces were united in the course of the afternoon the further advance towards the 'rock', which Arrian mentions as having been made during the remainder of the day, could present no difficulty. This advance would necessarily lie along the crest of the range as far as the Būrimār plateau. That it came to a standstill, as Arrian records, without any attack on the rock being possible at the time is fully explained by the great natural obstacle met beyond, the fosse of the Būrimār ravine.

The ravine below Būrimār.—I have already described above the general character of this ravine, its considerable depth and the precipitous nature of its slopes. But in order to realise better how fully its features explain

Alexander's resort to having a mound constructed to cross it, attention must be called to some details. I have referred above to the protection afforded to Pīr-sar by the extremely steep rocky slopes with which the Bar-sar hill forming its northern bastion falls off towards the ravine some 800 feet lower separating it from Būrimār. These slopes, so easily defended from above, could not be attacked with any chance of success unless they could be brought within the range of missiles.

Now the direct distance separating the top of Bar-sar from ground on approximately equal level on the Būrimār plateau is some 1,300 yards, and that between the Māshlun shoulder of Bar-sar and a corresponding elevation on the slope below Būrimār certainly not less than 500 yards. It hence follows that since the ballistai and katapeltai forming the Greek artillery of that period could throw stones and darts only to a distance of some 300 yards,[2] and slingers and bowmen their missiles not much farther, it was necessary to advance the position from which their fire was to be used. This could be done here with effect only in a horizontal direction, for a descent into the ravine would not have increased the chance of commanding the higher slopes.

The ingenious expedient of constructing a mound to secure this object is thus fully accounted for by the configuration of the ground observed at the Būrimār ravine. The use made of timber for its construction, whether in the form of stakes or tree-trunks, fully agrees with the abundance of tree growth still observed on the slopes both above and below the Būrimār plateau. Undoubtedly this plentiful timber available on the spot would supply the handiest material for the purpose. That the mound is said to have been advanced a stadion or about 200 yards on the first day is easily understood in view of the slope near the eastern edge of the Būrimār plateau being comparatively easy. But it becomes steadily steeper and steeper as the bottom of the ravine is approached, and in consequence the rate in the daily advance of the mound was bound to decrease in proportion to the greater depth to be filled up. Thus it is explained why, even when on the fourth day a few Macedonians had forced their way to a small hillock on the opposite slope, it was necessary to continue work on the mound in order to join the two, as Arrian tells us.

The shoulder of Māshlun.—I believe we can safely recognize this 'small hillock' (ὀλίγον γήλοφον) in the shoulder of Māshlun, described above. Its level as measured by aneroid is about 450 feet above the flat portion of Pīr-sar. It is true that Arrian calls this small hill "ἰσόπεδον τῇ πέτρᾳ", 'level with the rock'. But this is easily understood, considering that a continuous slope passing Bar-sar connects Māshlun with the plateau portion of Pīr-sar. That there still rose a steep height above the 'small hillock' is made perfectly clear by Arrian's own narrative, where he describes the stiff climb which brought Alexander and his 700 to the top of the 'rock' after the mound had been joined to the hillock and while the defenders were abandoning Aornos. I myself well remember the trying scramble over steep crags by which

[2] Cf. M'Crindle, *Invasion of India*, p. 21.

the summit of Bar-sar was gained after my visit to Māshlun. I can hence realize what this ascent of about 350 feet may have meant for men encumbered by armour. That the height of Bar-sar was a very convenient place for the Macedonians to assemble and then at a preconcerted signal to turn upon the retreating barbarians, as related by Arrian, is obvious. In the same way it is easy to understand that some of the latter in their terrified flight during the night lost their lives by falling down precipices below Pīr-sar.

SECTION vi.—OLD REMAINS OF PĪR-SAR AND THE NAME ŪṆA

The above observations will show how closely all topographical details about Pīr-sar agree with what our extant records tell us of Aornos and Alexander's operations against it. But this identification receives further support from antiquarian and philological evidence. There is no suggestion whatsoever in our texts of the natural defences of Aornos having been strengthened by the hand of man, and we may attach all the more significance to this negative fact in view of the obvious desire of our authors to emphasize the greatness of the difficulties overcome at the capture of the stronghold. That Aornos was recognized by them to have been solely a natural stronghold is clearly shown by the fact that they ordinarily designate it simply by the term *petra*, 'the rock'.[1]

But we are told by Arrian that Alexander after the capture built there a fortified post and entrusted its guard to Sisikottos, an Indian deserter who had joined him in Baktra and proved trustworthy. Curtius, too, mentions Sisicostus (*sic*) as having been charged with the guarding of the rock and the adjoining territory. Curtius further mentions that Alexander erected altars on the 'rock' to Minerva and Victory, while Arrian refers merely to sacrifices performed there by him.

Remains of fort on Bar-sar.—In view of Arrian's statement it is of distinct interest that I found the badly decayed remains of what undoubtedly was a small fort on the summit of Bar-sar (Fig. 59). The walls occupy whatever level space there is on the top; to the north, towards Lānde-sar, they descend also on the slope. As shown by the sketch plan, Pl. 8, they form an irregular quadrilateral of which the longest side eastwards measures 136 feet and the shortest to the north 66 feet. The walls, 5 feet thick throughout, are deeply buried in debris and earth, largely humus deposited by decay of the luxuriant forest vegetation which has grown up and flourished evidently for centuries between and over the ruins. It was only by a careful search that the lines of the enclosure could be traced. What little excavation was possible within the limits of time and labour showed masonry of a type not unlike that found at Bīr-kōṭ and at ancient dwellings of early Buddhist times in Swāt, stone slabs, unhewn but fairly uniform in thickness, being set in mud plaster.

[1] The same notion seems to be conveyed also by Curtius, where, in recording Alexander's triumph, he speaks of him as 'rex locorum magis quam hostium victor; cf. *Historiæ*, VIII, xi.

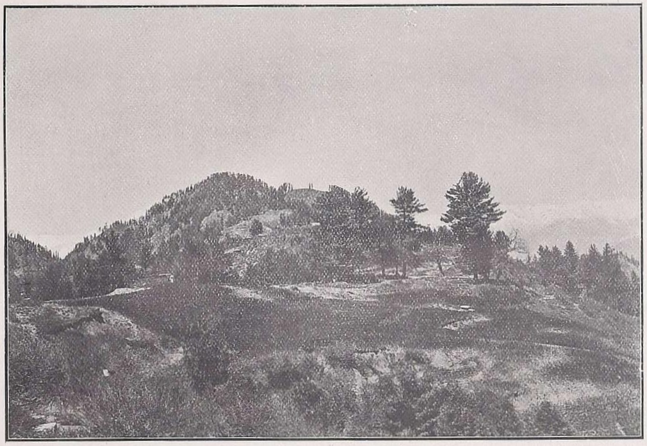

FIG. 56. FIELDS NEAR MIDDLE OF PĪR-SAR RIDGE; MĀSHLUN ON LEFT; BAR-SAR AND LĀNDE-SAR MIDDLE.

FIG. 57. INDUS RIVER WITH SNOW-COVERED RANGE TOWARDS KĀGHĀN, SEEN FROM BELOW KUZ-SAR.

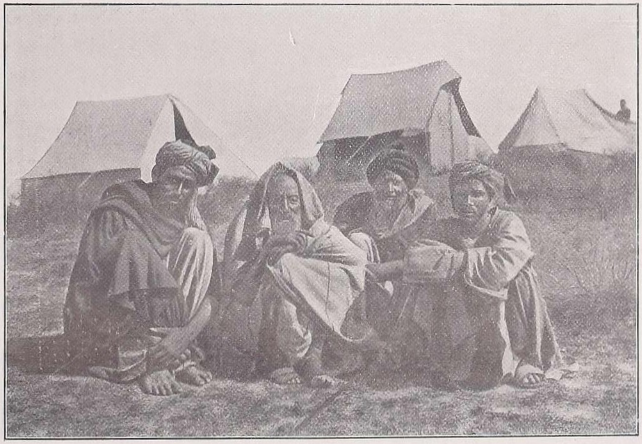

FIG. 58. IBRĀHĪM BĀBA AND OTHER GUJARS OF RANZERO HAMLET, EXAMINED ON PĪR-SAR.

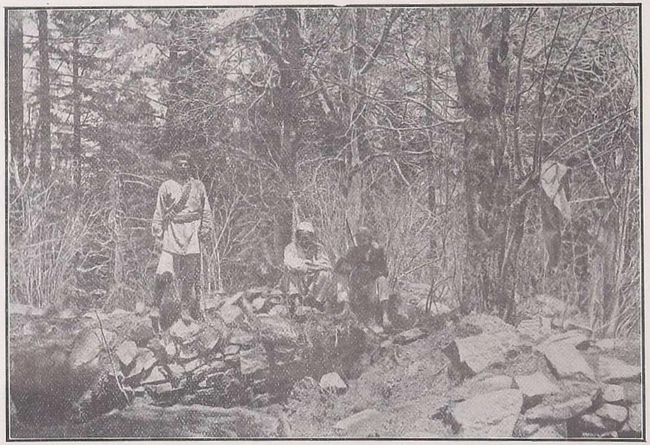

FIG. 59. REMAINS OF WALLS OF RUINED FORT ON TOP OF BAR-SAR.

Among the potsherds discovered on the floor of one of the rooms there were some showing ornamentation similar to that found at Buddhist sites of Swāt but less finished.

What pointed to considerable antiquity was the far-advanced decay of the whole structure as compared with the fair condition in which most of the ruined dwellings and fortified mansions dating from Buddhist times are found at Swāt sites. Yet these by their position are far more exposed to erosion and other destructive factors than a structure on the very top of Bar-sar could be. The position is such as could not have been chosen for any other purpose than defence. Whether the remains indicated can go back as far as the Macedonian invasion, and whether they mark the spot where the fort erected under Alexander's orders might have stood, it is impossible to assert without thorough investigation, such as was not practicable at the time of my visit. But it is certainly noteworthy that the ruined fort crowns just that height which protects the Pīr-sar plateau on the side where, as we have seen, it was most exposed to attack.

Local lore of Gujars.—The old Gujars who had been summoned from the hamlets below as depositories of local lore (Fig. 58), knew of no special tradition attaching to those ruined walls.[2] Nor had they ever heard of Alexander having visited these parts. But they had been told by their elders that Pīr-sar had served as the summer abode of a Rāja called *Sirkap*, who otherwise lived below at the village of Sarkul on the Indus opposite Thākōt. This name of 'Rāja Sirkap' is widely attached to ancient sites in these parts on either side of the Indus. But it gives no clue beyond indicating a traditional belief that the Pīr-sar plateau was occupied in early times long before the advent of Islām. The same Gujar informants derived the name Pīr-sar from a Sayid Pīr Bēghan, who is said to have lived on the plateau before the Pathāns took the land, and to have been buried as a saint at the previously mentioned Ziārat, near the centre of Pīr-sar.

Whether any datable remains are hidden in the ground now under cultivation or occupied by Gujar huts and graveyards on Pīr-sar it is impossible to say. But in the mosque which lies some 300 yards south of the Ziārat there are two large carved slabs of white calcareous stone, now used to support the roof but undoubtedly ancient. Their exposed portions measure 6 feet in height, with a width of 16—17 inches and a thickness of 4 inches. They were said to have been dug up somewhere near the centre of the area some time ago. But nobody could or would indicate the exact spot; my inquiry here, as elsewhere, suggested, no doubt, an intention to hunt for buried 'treasure'.

Derivation of name Ūṇa.—There still remains the philological evidence to be set forth. It is furnished by the name *Ūṇa*, in Pashtu also spent *Ūṇra*. Coupled with the Pashtu term *sar*, 'head,' 'height,' it is applied to the summit which rises between the 'Little Ūṇa' spur and Būrimār and overlooks Pīr-

[2] Among them was Ibrāhīm Bāba, a venerable old man, who was brought up with much trouble in a litter and declared to be a fountain-head of local information. He remembered having fought as a man between twenty and thirty against the British at the Ambēla Pass in 1862.

sar. There is good reason to assume that this name *Ūṇa* applied at one time to the whole massif of which Ūṇa-sar forms the culminating point and included also that conspicuous portion of it, Pīr-sar. To this points the fact that the culminating height is always called *Ūṇa-sar*, literally the 'head of Ūṇa,' not merely Ūṇa as it might have been otherwise, as well as the designation 'Little Ūṇa' for a small spur more than half a mile away from the summit.[3]

On the other hand the name *Pīr-sar*, the 'Saint's height,' is obviously of late origin, being made up of a Muhammadan term as its first part. We do not know what earlier designation it replaced, nor what the exact indigenous form of the local name was which the Greek Ἄορνος was intended to reproduce. But if we assume it to have sounded **Avarṇa*, it is as easy to account for its phonetic transition into modern Ūṇa (Ūṇra) as it is to prove that Ἄορνος was the most likely Greek rendering of it. As regards the latter, it will suffice to point to the Greek Ἴμαος as the well-known rendering of the Sanskrit *Himava(n)t*, applied like its doublet *Emodos, Haimavata*, to the Himālaya range, or what was believed by the Greeks to be a portion of it.[4] That the name rendered by Ἄορνος appealed to Greek ears also by its apparent Greek meaning '(the mountain) where there are no birds,' is likely enough. We know from the reproductions of other Indian local names how ready Alexander and those with him were to seek an echo of Greek words in the Indian appellations they heard.[5] But there is not the least reason to doubt that Ἄορνος was meant to render a genuine local name and was not a freely invented Greek designation.[6]

There is definite philological evidence to show that in the modern name *Ūṇa* (*Ūṇra*), pronounced with that peculiar cerebral *ṇ* sound which in Pashtu spelling also figures as *ṇr*, we may safely recognize a direct phonetic derivative of an earlier form **Avarṇa*, the assumed original of Aornos. The contraction of an earlier *ava*, both initial and medial, into *u* is well known to the phonology of the Dardic as well as of the Indo-Aryan language branches.[7] Similarly the regular assimilation of the cerebral consonant *r* to a following *ṇ* and the subsequent simplification of the resulting double consonant *ṇṇ* into *ṇ*, with eventual complementary lengthening of the preceding vowel, is fully attested in the phonetic development of both Indo-Aryan and Dardic languages.[8]

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[3] See below p. 100 for the exact parallel offered by the name *Ilam-sar*, applied to the culminating portion of Mount Ilam, while the simple name Ilam is used for the whole of that massif on the Swāt-Bunēr watershed.

[4] Cf. Arrian, *Indikē*, ii, 3. In Ptolemy's Geography Imaos undoubtedly represents the great meridional range which joins the T'ien-shan to the Hindukush.

[5] See Weber, 'On the Greek pronunciation of Indian words,' *Indian Antiquary*, ii. pp. 147 sqq. For well-known instances of this kind of 'popular etymology', cf. *e.g.* Ἀκεσίνης 'the healer,' as Alexander's rendering of the old Sanskrit name *Asiknī* of the river Chenāb in the Panjāb, and the inauspicious interpretation of its other name *Candrabhāga* as Σανδαρόφαγος as 'eater of Alexander'.

[6] It deserves to be noted that the fanciful interpretation of the name Ἄορνος as meaning 'inaccessible even to the birds' is only to be found in such late authors as Philostratos, Dionysios Periegetes and Pseudo-Callisthenes (see C. Müller's edition, III, iv, note). It could scarcely have appealed very seriously to the Macedonians who on their passage from Baktra across the Hindukush had seen mountains so much higher than any to be met in this portion of the Indus valley.

[7] See Grierson, *Piśāca Languages*, pp. 88, 126; 'Phonology', *Z. D. M. G.*, 1895, p. 409.

[8] Cf. Grierson, *loc. cit.*, pp. 21, 123; *Z. D. M. G.*, 1896, pp. 21, 28.

Notice of Chares of Mytilene.—I have left it to the last to consider a classical notice, which, if it is taken to refer to Aornos, as I believe it must, is of quasi-chronological interest and indirectly helps to support the proposed location of that stronghold. Chares of Mytilene, one of Alexander's chief officials, is quoted by Athenæus as having in his history of Alexander recorded a method of conserving snow used at the siege of the Indian town of Petra. According to Chares, we are told, "Alexander ordered thirty trenches to be dug close to each other and to be filled with snow, branches of trees being also thrown in, in order that the snow in this way may be preserved longer."[9] I believe that in this stray notice we have a useful indication both of the elevation of the 'rock' and of the season when Alexander besieged it.

We know from a record of Aristobulos, who shared Alexander's campaign and is quoted by Strabo, that the army, having set out for India from the Paropamisadai, *i.e.*, the valleys between the Hindukush and Kābul, after the fall of the Pleiades spent the winter in the hill territories of the Aspasioi and Assakēnoi, but in the early spring descended to the plains and moved to Taxila.[10] That the siege of Aornos was the last of the major operations carried out before the crossing of the Indus and the advance to Taxila is quite certain from the concordant records of Arrian and the other historians. And also that this operation was undertaken after Alexander had descended to the plain of the Peshawar valley. We can therefore place that siege neither much before nor much after the month of April 326 B.C.

Climatic conditions of spring season.—Now from my personal experience on my recent explorations in the Swāt region during March, April, and May, and from the climatic conditions previously observed on similar ground of the North-West Frontier, I may safely assert that in April snow could not be found there much below an elevation of 6,000 feet. On the other hand, should water be needed for large numbers, the need of preserving snow for drinking purposes on heights situated between 6,000 and 9,000 feet might well arise at a season when slopes are exposed to the powerful sun of an Indian spring. From what I saw on my way past the Ūṇa peak and the adjacent heights I believe that the expedient recorded by Aristobulos would probably nowadays also recommend itself if troops were obliged for a time to occupy that high ground and its southern slopes.

The spring of 1926 had been quite exceptionally belated. Yet at the time of my visit at the very end of April we found snow only in small sheltered hollows on the northern slopes of Mount Ūṇa and none at all on the south. The fine spring above 'Little Ūṇa' and another at Adramār, about the same distance on the opposite side of the peak, would scarcely suffice for a large

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It deserves to be noticed that the strongly cerebral sound ṇ (ṇr) of Pashtu occurs not only in words borrowed from Indian dialects, but also represents the old Iranian combination $r+n$; cf. Darmesteter, *Chants populaires Afghans*, pp. xlvii sq.

[9] See Athenæus, III, p. 124, C, as quoted by C. Müller in his edition of Arrian, *Fragmenta*, p. 117. Anspach, *De Alexandri Magni expeditione Indica* (Leipzig, 1903), p. 32, note 90, rightly observes that the erroneous designation of Petra as a 'town' must be attributed to Athenæus, not to Chares.

[10] Strabo, *Geographia*, XV, p. 691.

force encamped on this part of the range. Hence a thoughtful commander, faced by uncertainty as to the length of his stay on those heights, would only act wisely if he took steps to conserve whatever remained of the winter's snow-fall. We thus see that this fragmentary reference also perfectly accords with that combined evidence of texts, topography, and name which has led us to locate Aornos on that rock-girt site adjoining Mount Ūṇa.

Had I not been obliged to consider the discomforts to which the men were exposed and the trouble of keeping our large protecting host supplied at a height so difficult of access and so far from any larger place, I should have gladly extended my stay on Pīr-sar beyond the three days spent there. So fascinating was the historical interest attaching to the site and so grand and extensive the views which it offered in all directions. From the high snowy ranges surrounding the Indus Kohistān in the north they ranged past the Black Mountains and the valley of the Indus down to where the great river expands its bed in the plain above Attock. As the eye followed the river's tortuous course to the south I could clearly see through my glasses how useless it would be to look for another plateau like Pīr-sar among the jumble of chopped and serrated hills stretching down through Pūran and the Chagarzai country towards Bunēr and Mahāban.

It was in the direction of Bunēr and through the valleys of Chakēsar and Pūran, intervening between the drainage areas of the Ghōrband and Barandu rivers, that my next moves were to take me. On general grounds it is likely that some of these hill tracts to the west of the Indus had also seen the passage of Macedonian forces after Aornos had been captured. But the information furnished by our available sources about Alexander's operations immediately following that great feat is too brief and divergent in details to permit his route to be traced with any certainty. Nevertheless a succinct review of this information may conveniently be inserted here.

Arrian on operations after the capture of Aornos.—Arrian tells us that Alexander moved from the rock into the territory of the Assakēnoi, having been informed that the brother of Assakēnos, with elephants and a host of neighbouring barbarians, had taken refuge in the mountains of that region.[11] When he reached there the town of Dyrta he found it, together with the surrounding district, abandoned by its inhabitants. Thereupon he detached certain commanders to examine the localities and to secure information from any barbarians captured, particularly about the elephants. Assakēnos is mentioned before by Arrian as the ruler whose capital Massaga was taken on the Macedonians' first entry into Lower Swāt. Hence the mountain region in which his brother had taken refuge, and which was reckoned as part of the territory of the Assakēnoi, might well have been Bunēr; for this, as the records of the Chinese pilgrims clearly show, was in ancient times included in Swāt territory, just as it is now again.[12] But as the position of Dyrta cannot be identified and no other indications are furnished, the above remains uncertain.

[11] See *Anabasis*, IV. xxx. 5, sqq.

[12] Cf. *Serindia*, i. p. 9.

Bunēr can be reached from the side of Pīr-sar and Chakēsar by several routes leading through Pūran and the Mukhozai and Chagarzai country. And to Bunēr seems to point what we are next told about Alexander having marched on the Indus: "and the army going on before made a road for him, as those parts would otherwise have been impassable." This description would well apply, as first suggested by General Abbott, to the most direct route leading from the central parts of Bunēr to the Indus along the Barandu river; for the lower valley of the latter, as yet unsurveyed and in part inaccessible owing to the colony of 'Hindustānī fanatics' at present settled there, is reported to be a narrow gorge in places impracticable for traffic.

From captives Alexander learned that the Indians of that territory had fled to Abisares, *i.e.*, to the ruler of Hazāra, having left the elephants behind by the river. Alexander's successful capture of these elephants is then related. Finally we are told that, serviceable timber having been found by the river, this was cut by the troops and the ships built with it taken down the Indus to where a bridge had long before been constructed by the other portion of the army.

Accounts of Diodorus and Curtius.—Diodorus' account of what followed the capture of Aornosis very brief. We are told by him that Aphrikes, an Indian chief, was hovering in that neighbourhood with 20,000 soldiers and 15 elephants. The chief was killed by his own men, who brough this head to Alexander and thereby purchased their own safety. The elephants wandering about the country were secured by the king, who then arrived at the Indus, and finding it bridged gave his army a rest of thirty days before crossing to the left bank.

Curtius' account, evidently taken from the same source, supplements the above by some details. But these do not furnish any clear topographical guidance.[13] Alexander is said to have marched from the 'rock' to Ecbolima. Having learned that a defile on the route was occupied by 20,000 armed men under Erix, he hurried forward, dislodged the enemy with his archers and slingers, and thus cleared a passage for his heavy-armed troops behind. Erix was killed in flight by his own men and his head brought to Alexander. Thence he arrived after the sixteenth encampment at the Indus, where he found everything prepared by Hephaistion for the crossing.

That by Ecbolima the same place is meant as Arrian's and Ptolemy's Embolima is very probable; also that the chief Erix is the same whom Diodorus calls Aphrikes. But both authors fail to give any clear indication as to where the defile held by this chief lay. If the sixteen marches to the Indus crossing have to be reckoned, as Curtius' wording implies, from that defile, this certainly could not be looked for on the Barandu river; for thence the march to Ūnd (Uhand), the ancient Udabhāṇḍa, where the passage of the Indus in all probability took place,[14] could not possibly have taken more than four or five marches. However this may be, Curtius' reference to those sixteen marches

[13] *Historiæ*, VIII, xii.

[14] Cf. Vincent Smith, *Early History of India*, 2, p. 55.

if considered together with Arrian's account, shows that Alexander's operations after the taking of Aornos must have been fairly extensive. In this we may well recognize a fresh proof of the importance which was attached by him to the complete subjugation of the Assakēnoi.[15] The need to secure the flank of the main line of communication towards India against interference from the hills northward may account for this.

Difficulties overcome on Alexander's Frontier campaign.—On his arrival at the Indus and at the starting point of his invasion of India proper we must leave the great conqueror. There is no need to attempt here an appreciation as a whole of the military achievements of the campaign which preceded that invasion and of which we may now consider to have traced the chief scenes. But there are a few observations which deserve to be briefly noted. The outstanding feat of that campaign, the capture of Aornos, was bound at all times to appeal most to the imaginations of Alexander's historians and has hence tended to obscure to some extent the greatness of the triumph over nature which the successful execution of the entire campaign in the course of a single cold weather season must have implied. Only those who are familiar with all the difficulties besetting operations in the mountain territories beyond the present North-West Frontier and with their military history in recent times can fully realize the magnitude of the obstacles which Alexander's genius as a leader and the extraordinary pluck and endurance of his hardy Macedonians faced and victoriously overcame in the course of the campaign carried from the Kūnar to the Indus.

Among the difficulties to be reckoned with nowadays there figures quite as largely as the mountainous character of the country the absence of local resources sufficient to feed large bodies of troops and to supply the transport needed for their rapid movement. Consideration for this fact of the present day necessarily raises the question as to whether economic and cultural conditions affecting those essential resources may not have undergone changes since the times of Alexander. It is a question of distinct antiquarian interest, especially in view of corresponding indications which may be deduced from the extent and importance of the ruins left behind by the Buddhist civilization of subsequent centuries. The question has also its distinct geographical bearing, but this is too large to be discussed in this place.

CHAPTER V.—FROM THE INDUS TO MOUNT ILAM

SECTION i.—RETURN TO BUNĒR

On the morning of April 30th I left Pīr-sar, not without regret, for the journey which was to take me through the hill tracts of Chakēsar, Pūran and

[15] Arrian, V. xx. 7, mentions a report which Alexander, while on his way to the Akesines or Chenāb, received from Sisikottos, the Satrap of the Assakēnoi, about their subsequent revolt, and records the measures taken by Alexander to quell this.

Mukhozai, not previously visited by any European, to Bunēr and thence back to Swāt. The march down to Chakēsar, long and rather fatiguing, led once more past the slopes of Mount Ūṇa and then for some distance along the crest of spurs descending from the Upal range. Looking back from them to the east I could sight again and again the long stretched level height of Pīr-sar on the flank of Mount Ūṇa and realize how conspicuous and dominating is its position.

Importance of Chakēsar.—Chakēsar, the chief place of the valleys held by the powerful Azī-khēl clan, proved quite a small town and the seat of several 'Jumāts,' schools of Muhammadan theology. Taken together they represent a curious counterpart of a small mediæval university. Owing to its position close to the point where much frequented routes from Kāna, Upper Ghōrband, Bunēr and the Indus valley meet, Chakēsar is a local trade centre of some importance. There is much cultivable land in the neighbouring valleys and plenty of ruined walls supporting terraces, meant for cultivation but no longer tilled, can be seen on the slopes around. On those facing the upper end of Chakēsar from the north I was shown the site of *Sērai* where ruins of ancient dwellings were said to have stood until recent times. They had been pulled down to furnish building materials for the towers built by rival Khāns and for the strong fort erected by the new ruler of Swāt since he took possession of all these valleys right down to the Indus. The walls supporting terraces near by had probably been renewed more than once. But in one of them masonry of good Gandhāra type survived proving antiquity.

Move across Pūran.—At Chakēsar I was able to collect interesting linguistic material in the shape of specimens of the as yet unrecorded Kohistānī dialect spoken at Batēra above the confluence of the Ghōrband river with the Indus; and then on May 3rd I started westwards. The route led across the Kāghlun pass, about 6,200 feet above sea-level, into the wide and fertile valley of Pūran. From its head where the Yakh-tangai pass gives access to the head-waters of the Ghōrband river, right down to where it debouches on the Indus near Kābalgrām the valley is remarkably open. There is abundance of good land easily capable of irrigation; but owing to an inadequate population and the disturbed conditions prevailing until recent years much of it appeared to be uncultivated. Of ruins I could learn nothing.

From here our route turned into the large side valley which descends from the Dwasarē (Dosirri) peak on the watershed towards Swāt and forms the main portion of the Mukhozai tract. Amidst fine scenery recalling Kashmīr much well cultivated land was passed here, before we approached the pass of Nawe-ghākhai on the well wooded range which forms here the eastern border of Bunēr. As soon as this pass, about 5,300 feet high, had been crossed into the valley of Gōkand I found myself on ground which like the rest of Bunēr already visited by me in 1898 retains ruins dating from Buddhist times.

Ruins in Gōkand valley.—Within a mile to the south of the fort of Kuz-Gōkand where our camp stood on May 6—7th, a detached hillock juts out into the picturesque valley near the small hamlet of *Kōtkai.* It bears on it

top ruins of dwellings extending for a length of some 90 yards. The lower portions of the walls show in most places ancient masonry while those raised above these and still standing to heights of 6—7 feet are of much coarser workmanship and manifestly date from later repairs. Ascending across a narrow gap to a spur on the south-east, I found at a height of about 250 feet above the road half-a-dozen small detached quarters built in tiers along the narrow crest. Their construction corresponded closely to that seen in the ruined dwellings I had visited above Kōtāh and elsewhere in the Swāt valley. More ruined dwellings of the same type were to be seen clustering on the small ridges of *Dumchaka* and *Kandao-gai* to the east of the road two and three miles, respectively, further south.

Where the valley considerably widens about six miles below Kuz-Gōkand we passed the large village of Bagra on the western bank of the stream and keeping to the opposite side of the valley reached the mouth of the side valley bearing the significant name of *Tōp-dara*. Just before we turned into this I was shown on a rock face rising above the riverine meadow a much weathered relieve carving, about 3 feet high. It represents a Bodhisattva, probably Avalokiteśvara, in the same attitude as seen on the numerous rock carvings in Upper Swāt already mentioned.

Stūpa of Tōp-dara, Gōkand.—Moving up the side valley and passing Tōp-dara village there was reached after about two miles first a fine spring in a grove and some 300 yards further on the ruined Stūpa that has given the valley its name. Like the slopes on both sides of the valley the Stūpa is thickly overgrown by luxuriant vegetation. This owing to the low elevation, only about 2,800 feet, includes wild fig trees and shrubs not seen since leaving the Peshawar valley. In spite of this growth of vegetation the structure is on the whole remarkably well preserved. The square base approximately orientated measures, as seen in the sketch plan (Pl. 8), 80 feet on the east and west sides and 75 feet on the other two. Its height, as measured at the NE. corner where it is practically intact, is 8 feet, including a slightly projecting cornice 1 foot high. Though the thick growth of trees and shrubs rendered measurement somewhat difficult it was possible to determine the two circular bases, 5′ 4″ and 3′ 6″ high, respectively, including in each case a cornice of about a foot in height. The Stūpa rests on a cylindrical drum 7 feet high and above this had apparently a hemispherical shape. It had been dug into from the north-west right to the centre and the relic deposit probably reached. A flight of stairs, 19′ 8″ wide, led up to the square base on the north.

The top of these stairs extends along one-third of the north side of the square base, just as at the Stūpa of Shināsī. Close comparison of the plan and section of the latter, as seen in Pl. 7, reveals the interesting fact that the dimensions of both Stūpas are nearly identical in all respects.[1] Is it possible that both were built by the same master mason or copied from the same

[1] The poor preservation of the bases at the Shināsī Stūpa may well explain the measurement of the lowest having been assumed there to be 75 feet square while at Tōp-dara it is 80 by 75 feet.

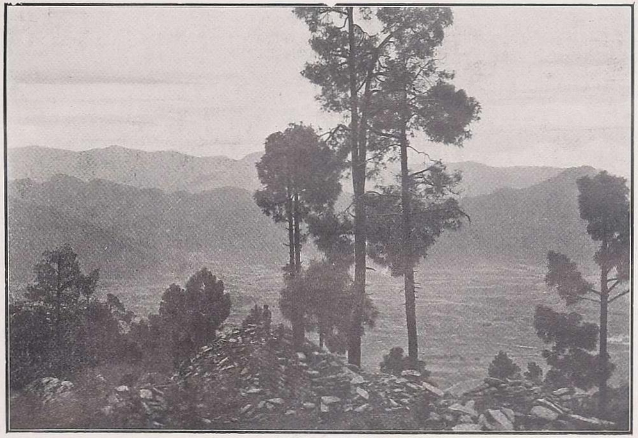

Fig. 60. Remains of ancient habitations on Ramanai spur above Pacha, Bunēr.

Fig. 61. Masonry in ruin of ancient dwelling, Ramanai spur.

Fig. 62. Rock-carved relievo of Bodhis attva, near Jāre, on left bank of Swāt River.

Fig. 63. Ancient pottery vessels from sites near Khwāja-khēl, brought to Shālpin.

model? The facing of the dome consists of remarkably well laid masonry of the Gandhāra type and in place still retains a coating of cement-like hard plaster. It is probably due to this solidity of construction that the dome has not suffered more damage. When I had a big wild fig-tree which threatened to dislodge stones on the SW. section of the topmost base, cut down the owner of the ground around came to remonstrate against this loss of valuable grazing for goats.

Near the north-east corner of the square base are the remains of a badly decayed smaller Stūpa. Its lowest base, 36 feet square, could be traced, but nothing of the superstructure. A deep hole showed where the centre had been dug into for its relic deposit. Near the north-west corner of the large Stūpa there survive the walls, 3 feet thick, of an oblong hall or Vihāra, measuring 26 by 16 feet. They rise nowhere more than 3 feet above the ground. The ruins occupy the triangular end of a tongue-like bit of ground between two small Nullahs and both to the east and south there are large terraces probably levelled already in antiquity. On the eastern one wall foundations survive for about 30 yards. On my return from this site I was told of remains of ruined dwellings to be found in the wide amphitheatre-like Nullah known as *Pīr-dara* which opens opposite to Tōp-dara towards the western bank of the Gōkand stream; but the lateness of the hour did not allow me to visit them.

Stūpa of Bingalai.—When on May 7th we left the Gōkand valley south-westwards for Pacha I came unexpectedly in the small Nullah of *Bingalai* upon a ruined Stūpa not previously reported. It occupies the top of a small hillock. Its remains have suffered much damage through a Gujar dwelling which has been built against and partly dug into it on the south. But the walls supporting the quadrangular base could still be traced amidst thick scrub for short stretches as well as indications of a circular base above it. They suggested a diameter of about 25 feet. About 25 yards off to the north a low heap of debris seems to mark the position of a completely wrecked small Stūpa. Here, too, a spring is found close to the ruin, showing the reason why this confined but picturesque site had been chosen by a pious founder.

Move into Bunēr.—From the wooded height of the Rājgalai pass, close on 4,200 feet above sea level, a wide panoramic view was gained over the open northern valleys of Bunēr. It was ground I well remembered from my tour with the Bunēr Field Force. In January, 1898, I had then been able to reach Pacha with General Meiklejohn's brigade and to accompany also a reconnaissance pushed with an escort of Guides Cavalry up towards the Jowarai pass as far as Bishunai.[2] Close to the village of Pacha there lies the holiest Muhammadan shrine in Bunēr, the Ziārat of Pīr Bāba Sāhib. It is visited all through the year by thousands of pilgrims whom the repute of the great saint buried there draws there from all parts of the Peshawar valley and the hill territories to the north as far as the Indus Kohistān. A halt under the walls of the Bādshāh's newly built fort about a mile and a half south of the

[2] See *Archæological Tour with the Bunēr Field Force*, pp. 19 sqq.

large grove surrounding the Ziārat, was rendered obligatory by the need which all my companions and protectors felt of performing prolonged devotions at the sacred spot. Heavy rain starting on the evening of May 8th and continuing practically without a stop through most of the following morning caused this halt to be extended for another day. A visit on my part to the holy shrine was not encouraged by my entourage; in 1898, too, I remembered, orders had been issued prohibiting unbelievers from entering it. But as I knew that there was neither architectural interest nor evidence of antiquity attaching to the saint's resting plave, this was not to be regretted very much.

Remains on Ramanai spur.—The enquiries made at Pacha did not indicate the existence of ancient remains in this part of Bunēr beyond those I had already surveyed in 1898, except on a spur which descends from Alak-sar, a conspicuous outlier of Mount Ilam, to the south-east towards the village of Bālo-khān. To this spur I proceeded in the afternoon of May 9th while heavy clouds were still enveloping all the hills. Drizzling vapour and mist hanging over valley and slopes alike coupled with the steamy air made the ascent on foot rather trying. There was no mistaking that over the wide open valleys of Bunēr the hot weather has already set in, the elevation of Pacha being only little over 2,500 feet.

The ascent led first up a thinly wooded spur where at an elevation of about a thousand feet above the valley walled terraces of abandoned cultivation were met. The first ancient ruins were found at a height of about 4,800 feet above a steep slope covered with exposed rocks. The ruins were those of small dwellings showing walls built with large roughly dressed slabs in fairly regular courses, small flat stones being used as in Gandhāra ruins to equalize the courses. Evidently the stratification of the rocks near by made it comparatively easy to obtain slabs fairly uniform in size.

Within a quarter of a mile further up there stretches the main cluster of such ruins for about 210 yards up a slanting narrow plateau. They all seemed to be the remains of tower-like single-roomed dwellings which had been built up solid to a certain height to provide greater security. As seen in Figs. 60, 61, the mounds which they have formed in decay present often the deceptive appearance of small ruined Stūpas. Some twenty-six of such detached dwellings were counted on the small plateau which is known by the name of *Ramanai*. The walls of these substructures rise often clear to a height of 5 or 6 feet. Some of the larger ones measure up to 32 by 25 feet, but only in the interior of one ruin could I distinguish a wall 3 feet thick dividing two apartments. The slabs showed lengths up to 5′ 6″ while their fairly uniform height was about 1 foot.

The general impression gained at the site was that of considerable antiquity. I have been reminded of them since by similar structures of undoubtedly prehistoric origin examined by me at some early sites of Makrān and Jhalawān. The fact that no potsherds could be found near them may perhaps be an indication of their having served mainly as places of refuge in times of trouble. But it must be remembered that as ample moisture provides here

vegetation and prevents denudation of the soil around ruins, pottery debris cannot be looked for on the surface to the same extent as is the case at ancient sites in such arid regions as Balūchistān or Sīstān.

SECTION ii.—THE SACRED HEIGHT OF ILAM-SAR.

The special reason that had prompted me to make my way back to Saidu through this northern portion of Bunēr was the wish to visit Mount Ilam. Already on my first visit to Lower Swāt in December 1896 I had learned of the pilgrimage which the Hindu traders settled in Swāt and Bunēr annually make to a Tīrtha or sacred site located on *Ilam-sar*, the summit of the mountain. While passing through Bunēr in January, 1898, I had been able to gather further details about this site, and these distinctly pointed to its local worship being an inheritance from very ancient times.[1] But the circumstances attending that tour made in the course of a military expedition would not allow of a visit being paid to the mountain top which in any case at that season would have been under a heavy cover of snow.

An additional archæological interest had subsequently become attached to Mount Ilam through a very tempting suggestion of M. Foucher who proposed to identify it with Mount *Hi-lo* described by Hsüan-tsang as the scene of sacred Buddhist legends.[2] Now at last the long desired opportunity had arrived to visit this fine peak which owing to its great height, 9,237 feet above sea level, and its impressive isolation on the crest line of the Swāt-Indus watershed dominates all views both from the Bunēr and Swāt sides.

March to Ilam-kile.—Starting on the morning of May 10th from Pacha we marched westwards steadily ascending along the slopes of the spurs which from the rocky heights of Alak-sar descend into the plain. Though light clouds were still floating over the big valleys to the south, I could catch glimpses again and again in the distance of ground where my work had taken me twenty-eight years before. Having passed the Gujar hamlet of Jobra after some eight miles' march we reached the wooded spur of *Bizo-sar* where ruins had been reported, at an elevation of about 5,700 feet.

A steep mound about 20 feet high which I had heard before spoken of as a 'Gumbat', proved to mark the remains of a small defensible mansion built in a dominating position and partly over supporting walls. These walls and whatever was exposed of the superstructure showed, like those of the smaller dwellings near by, rough but massive masonry of the same type as seen at Ramanai. The top of the mound measures about 45 feet by 32 and the supporting walls as far as visible below indicate an oblong shape also for the structure which stood here. Both to the NW. and SE. of this ruin are found broken walls of small detached dwellings. They are usually 3 feet thick and stand in places still to a height of 6—7 feet. The largest of these dwellings

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[1] See *Tour with the Buner Field Force*, pp. 21 sq.

[2] Cf. Foucher, *Notes sur l' ancienne géographie du Gandhāra*, *B. E. F. E. O.*, 1902, p. 48, note 3.

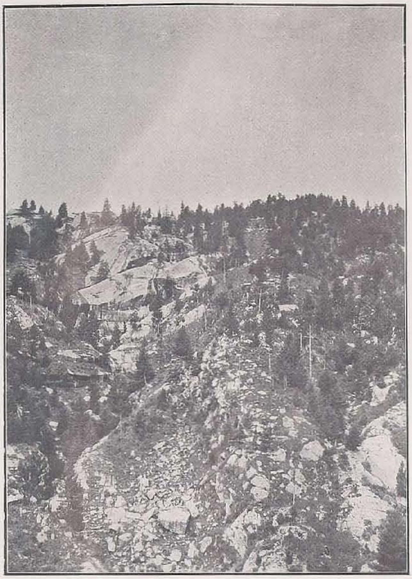
consisted of a room 20 feet by 18, and here an entrance 2½ feet wide was still distinguishable. Potsherds were here fairly abundant, and they included pieces showing raised or impressed ornamentation of the same type as found at sites of the Buddhist period in Swāt. The presence of pottery débris is here accounted for by ancient cultivation terraces which are found on the slopes immediately below and prove continuous occupation.

Miān villagers at Miān-kile.—From this point the path, now less steep, turned to the north-west and after a total march of about 14 miles brought us to the small village of Ilam-kile. It shelters with its terraced fields of maize in the valley which divides the broad mass of Alak-sar from the conical peak of Ilam-sar. Situated at a height of about 6,000 feet the little valley with its lively stream, its coolness and alpine surroundings made a very pleasant halting place on our ascent to the sacred summit. The land of Ilam-kile is held by twenty families of Miāns. Claiming saintly descent they are exempt from all imposts like the rest of the Miān clan, widely scattered through the Peshawar district and the valleys of Bunēr and Swāt. This privilege does not apply to the Gujars who cultivate here as their tenants.

Ilam-kile from its Miān inhabitants is often spoken of as Miāngām. It is under this name or else as *Ilm-o-mianz* that it figures as the place from which some of the forged inscriptions in 'unknown characters', so liberally supplied to Colonel Deane by the less scrupulous of his agents, in particular, 'Abdul Hanān and his gang, were alleged to have been obtained.[3] Ilam-kile cannot boast of epigraphic relics. But as it is the nearest inhabited place to the sacred summit it may well have served in ancient times for the residence of Buddhist monks or Brahman priests attending to pious pilgrims after the fashion prevailing at all Indian Tīrthas. Is it possible that the presence of Miāns at this little accessible place is in some way connected with the local worship of pre-Muhammadan times? It deserves to be noted that the Miāns who are everywhere supposed to be attached to particular Ziārats are not considered by Pathāns to be of their own race.

Application of name of Ilam.—Here I may conveniently note that the name *Ilam* is applied to the whole mountain massif forming part of the watershed range between the Karākar and Jaosu passes. The summit of its central peak is distinguished as *Ilam-sar*, 'the head of Ilam', while other determinatives are added to the name *Ilam* in order to des gnate neighbouring localities like the village of *Ilam-kile* and *Ilam-kandao*, the side spur to the north of the village over which leads the path to the Jaosu pass. The use of the designation *Ilam-sar* deserves special notice as it offers an exact parallel to the designation *Ūṇa-sar*, given, as we have seen, to the summit of Mount *Ūṇa*. This helps to support the conclusion that the simple name *Ūṇa* similarly has a wider application to the whole of that massif, and this may explain why the spur now known as Pīr-sar figures in our classical accounts as the 'rock of Aornos', *i.e.*, Ūṇa.

[3] See *Tour with Buner Field Force*, pp. 19 sq.; above p. 35.



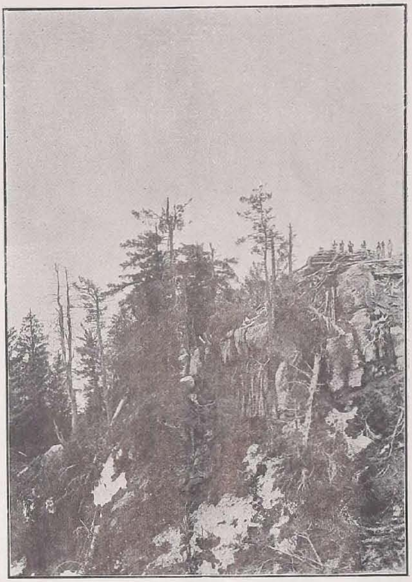


FIG. 64. SOUTH-EASTERN SLOPES OF ILAM-SAR, SEEN FROM ABOVE MIĀN-KILE.

FIG. 65. CRAGS OF MAIN SUMMIT OF MOUNT ILAM, WITH RĀM TAKHT.

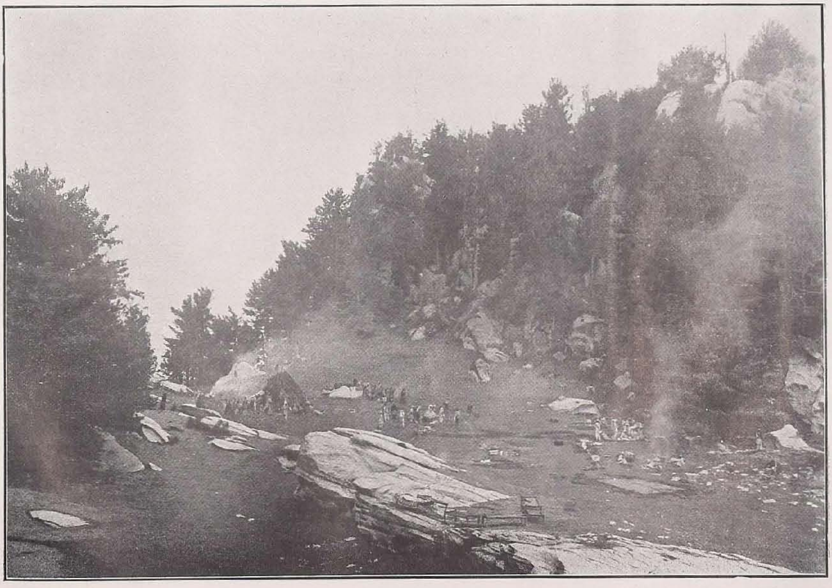


FIG. 66. HOLLOW ON TOP OF MOUNT ILAM WITH SACRED POOLS AND HSÜAN-TSANG'S 'STONE COUCHES.'

Ascent to Ilam-sar.—The path followed on our ascent to I am-sar on the morning of May 11th led first over easy slopes with terraced fields in places. Then having gained after about three miles a spur which northward overlooks the valley leading down to Saidu and Mingaora, the steep portion of the ascent began at an elevation of about 7,100 feet. Amidst luxuriant conifer growth there were soon encountered those huge masses of bare much weathered rock, apparently granite (Fig. 64), which are the most striking feature of the Ilam peak. In some places these big rocks have been undercut by erosion and carved into quite fantastic shapes. Thus one particular mass has the appearance of the beak of a gigantic beast.

Over and between these frowning crags the climb took us steeply for about an hour and a half. In places precipitous gullies, still filled with snow, were crossed amidst a thick growth of firs and pines. Below them violets and other early spring flowers had made their appearance in profusion. Mount Ilam enjoys plentiful moisture throughout a great part of the year. We rarely saw it from Swāt without clouds clinging to its head and during our stay there, too, it repeatedly was enveloped in light mist. This explains the great abundance of flowers and lush grass to be found on its slopes in the late spring and summer. Even the Gujars who were with us, stolid enough as their race is, would speak of this luxuriant vegetation with something like enthusiasm.

Rocky summit of Mount Ilam.—At last the tower-like mass of rock forming the main summit was reached. It is crowned by four isolated crags like the pinnacles of a square church tower and is difficult of access all round. The easternmost of these crags forms on its top a small platform which has been artificially enlarged with trunks of trees and stones (Fig. 65). An oblong stone heap raised on this platform is claimed by Hindu visitors as the *Rām Takht*, 'the seat of Rāma'. The god is supposed to have made a descent here from heaven. Gujars in pious rivalry claim the spot as the resting place of a 'Shahīd' or martyr. Everywhere in these hill tracts it is the Gujars who are the true preservers of tradition, and it is among them that we may expect local worship to survive here in its Muhammadanized guise.

Where the precipitous crags of the main summit fall away to the south there is found about 200 feet lower down a small and almost flat hollow (Fig. 66) flanked on the opposite side by the more gently rising slope of the southern summit. This hollow measuring roughly 150 yards from north to south and 100 yards across is a very curious feature of the mountain top. In the middle there crops out a series of large rock tables, smooth and almost flat on their tops, striking to the east in the direction of the drainage which escapes in a narrow cañon.

Sacred pools on summit.—To the south of them there lie in a line three small pools of nearly circular shape; Fig. 66 shows the uppermost of them. They are fed by a small spring which rises amidst the rock walls of the northern or main summit and sends its water in a small rill round the western rim of the basin. This spring is said to run dry later in the season until the Monsoon rains set in. The string of limpid pools are known to the Hindus as the

Amarakunda and form a special object of worship for the pilgrims. Their presence on the very top of the mountain must, indeed, appear wondrous in the eyes of the pious and would by itself amply suffice to endow the spot with the character of a true *svayaṁbhū-tīrtha*. The annual pilgrimage to it according to the information received from the Hindus I questioned at Pacha takes places on the first day of the month of Jyaiṣṭha when the ritual ablutions performed at the Amarakunda form the essential ceremony of the *yātrā*.

Hüsan-tsang's account of Mount Hi-lo.—But in Buddhist times the pious attention of pilgrims appears to have been attracted far more by those huge flat-topped couch-like rocks which stretch in a line by the side of the sacred pools. It is just the mention made of them which places beyond doubt the identification of Mount Ilam with Hsüan-tsang's Mount *Hi-lo*, as rightly conjectured by M. Foucher but on less conclusive grounds. Hsüan-tsang's account of *Wu-ch'ang-na* tells us of it in a passage immediately following that on the rock where Buddha had dried his clothes.[4]

"Above 400 li south from Mêng-ch'ieh-li is the *Hi-lo* mountain. The stream of the mountain valley flows west; as you go up it eastward flowers and fruits of various kinds cover the water course and climb the steeps. The peaks and precipices are hard to pass, and the ravines wind and curve. You may hear the sound of loud talking or the echo of musical strains. Square stones like couches made by art form an unbroken series over the gully. It was here that Tathāgata once gave up his life for the hearing of a half stanza of doctrine."

Sacred mountain identified with Ilam.—The general description here given of the mountain agrees as closely in all respects with the natural features of Ilam-sar as that of the 'square stones like couches made by art' with the large flat-topped rocks stretching across the hollow between the two summits. The distance indicated from Mêng-ch'ieh-li or Manglawar, 500 *li* or approximately 80 miles, is certainly wrong and the bearing which is south-west not south, is less accurately indicated than we usually find it in the *Hsi-yü-chi*. Yet our Chinese pilgrim guide was right in describing the stream of the mountain valley as flowing west. The principal drainage from the massif lies in the valley that descends west-south-west to below the Bunēr side of the Karākar pass and there it meets the stream coming from the pass near the village of Liganai. It is up this valley that the easiest route leads to the southern summit, and it is this route which, as I was told, is usually followed by modern Hindu pilgrims, anyhow from Bunēr and lower Swāt. Whether that summit takes its name of *Jōgiān-sar*, the 'Yōgīs' height', from this practice, I was not able to ascertain. My Chinese patron saint's sense of topography is thus vindicated, at least as regards the bearing of this valley.

Hüsan-tsang's road measurements.—It is impossible to offer any conclusive explanation of the great distance of 400 *li* which the *Hsi-yü-chi* indicates between Manglawar and Mount Ilam. But as we are justified in assuming Hsüan-tsang on his ascent of Ilam to have followed the usual pilgrims' track just mentioned it might be suggested that by the distance recorded in the

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[4] The translation is that given by Watters, *Yuan Chwang*, i, p. 231. It corrects what obviously is a mistake in that of Julien, *Mémoires*, i, p. 135, concerning the direction of the stream referred to.

Memoirs is meant not the direct distance but that actually covered by the pilgrim on the devious route which appears to have taken him first to a series of sacred sites in central Bunēr and only thereafter to Ilam. M. Foucher has already called attention to the fact that immediately after the description of Mount Hi-lo the *Hsi-yü-chi* gives an account of three sites (Mahāvana, Mo-yü and Śivika) all of which I believe to have before safely located in, or close to, the Barandu river traversing the centre of Bunēr.[5] From them we are suddenly taken north-west to the Shan-ni-lo-shih valley which certainly corresponds to the present Adīnzai tract due north of Chakdara. Now from the Barandu to Adīnzai the most direct and convenient road lies across the Karākar pass, and it is just below this that the usual pilgrims' track to Mount Ilam branches off eastwards. Thus it would certainly have been the most convenient way for Hsüan-tsang to visit Mount Ilam while *en route* from central Bunēr to Adīnzai. In this case the distance of 400 *li* would explain itself quite correctly as the aggregate for the whole journey from Manglawar to the sites in the Barandu valley and thence on to Ilam.[6]

Legends clustering about Ilam-sar.—That legends connected with local worship derived from ancient times still linger also among the Muhamadans of the neighbourhood is suggested by the name *Khānakā* (*recte* Khānagāh, 'place of worship') which is borne by a bold rocky spur descending to the south-west. The small gully separating it from Jōgiān-sar is known as Chihil-gazī and supposed to have received its name from a Ziārat which once stood there. The name is curiously reminiscent of some piece of Buddhist legendary lore; for there is reason to believe that the grave mounds of abnormal length worshipped at different places of the Peshawar district and neighbouring tracts as the resting places of saints and called according to their measured lengths *Nau-gaz Sāhib*, *Shil-gaz Sāhib*, *Chihil-gaz Sahib* ('Saints of nine, twenty or forty yards', respectively) are in reality the modern counterparts of colossal images once representing the Buddha in Nirvāṇa, a favourite subject in Buddhist iconography.

During our halt of forty-eight hours on the sacred summit magnificent panoramic views offered from its crags during the early hours of the morning and again in the late afternoon while the head of Ilam was clear of fleeting mist or clouds. From the high snowy ranges of the Swāt Kohistān and the

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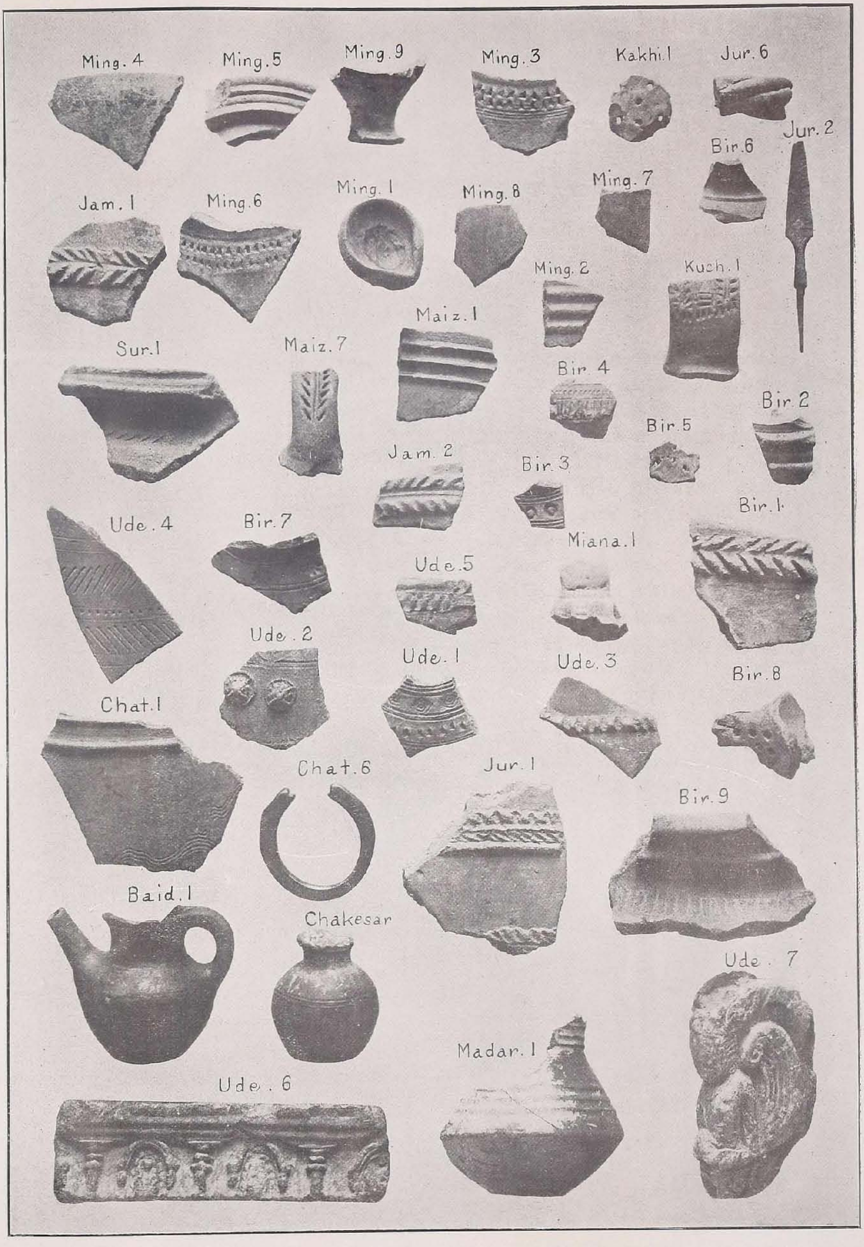
[5] See *Tour with the Bunēr Field Force*, pp. 60 sqq., for the identifications of *Mo-ha-fa-na* or Mahāvana Saṅghārāma with Panjkōṭai (Sunigrām), of the *Mo-yü* (or Mo-su) monastery with Gumbatai near Tursak, and of the Stūpa when the Buddha in a previous birth as King Śivika had sacrificed his body to ransom a pigeon, with the Stūpa ruin at Girarai.

[6] The distances and bearings given in the *Hsi-yü-chi* (Julien, *Mémoires*, i, pp. 136 sqq.; Watters, *Yuan Chwang*, i, pp. 232 sqq.) are: from Mêng-ch'ieh-li to the Mahāvana Saṅghārāma 200 *li* to the south; from there to the Mo-yü (or Mo-su) monastery 30 or 40 *li* to the north-west; from there to the pigeon-ransoming Stūpa, 60 or 70 *li* to the west. From Girarai, where I have located the last named site, to Ilam-sar the road distance cannot be reckoned at less than 13 or 14 miles, corresponding to 65 or 70 *li*. The aggregate of these several distances would approach very closely the distance of 400 *li* assumed above to represent the total length of the journey from Manglawar to the top of Mount Ilam.

If General Cunningham's estimate of Hsüan-tsang's *li* on Indian ground as one-sixth of a mile is accepted (cf. his *Ancient Geography*, p. 571) the total of the distances would agree still more closely.

Hindukush beyond Dīr and the bend of the Indus they extended over the whole of Swāt and Bunēr right down to the barren low hills encircling the Yūsūfzai plain. Peshawar with the mountains of Tirāh and the Safēd-kōh above Kābul are said to be visible in the clear atmosphere of the autumn or after rain. Now they were hidden by the hot-weather haze brooding over the plains. Mount Ilam, made so conspicuous by its central position and so imposing by its isolation, was indeed destined by nature to become an object of superstitious awe and popular worship from a very early period. Its summit was the right spot, too, from which to bid farewell, for a time anyhow, to a region of fascinating archæological interest.

Departure from the Miāngul's dominion.—After mid-day of May 13th I descended by the precipitous path leading down northward to the saddle of Sarbāb where the Bādshāh has established his summer 'hill station'. Thence the valley was gained which passes down to the fort of Miāna, and thus on the following day, moving past Buddhist remains already visited nearly two months before, we reached Saidu. There once more the kindest welcome awaited me from the ruler of Swāt. A busy day's halt allowed me to have long talks with the Bādshāh, to learn from this remarkable chief of the trials and struggles of the recent past and to express to him my deep gratitude for all the unfailing help and protection which had done most to render my labours in his dominion fruitful. On the morning of May 16th I said heart-felt parting thanks to my kind host, to the chief supporters of his rule and to my old and ever willing travel companion Rāja Shāh 'Ālam. My arrival on the Malakand the same day closed a tour which will always be remembered by me among the happiest of my exploratory travels.



SPECIMENS OF POTTERY AND OBJECTS IN STONE AND METAL FROM SITES IN UPPER SWĀT.

(Scale 2/5)

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(*Prepared by Dr. K. L. Fabri, Kern Institute, Leiden*).

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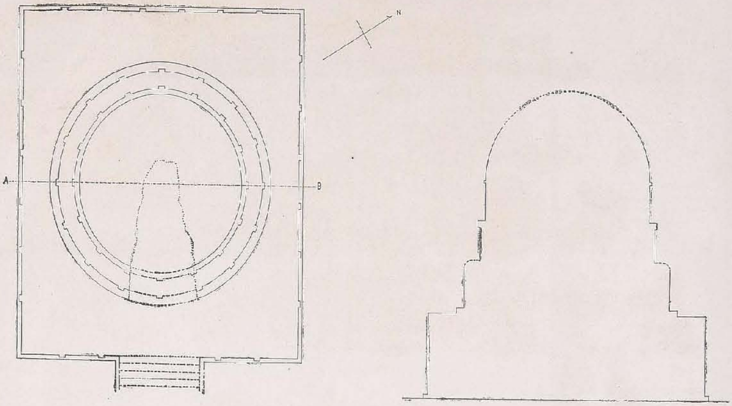
SKETCH PLAN AND SECTION OF STŪPA

TŌP-DARRA, HAIBATGRĀM

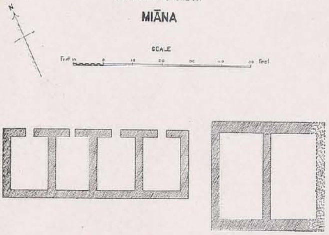
SCALE



SKETCH PLAN OF
RUINED STRUCTURE AT

MIĀNA

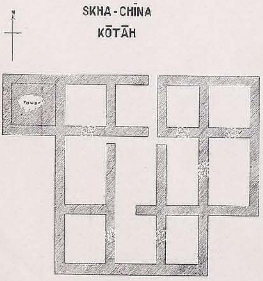
SCALE



PLAN OF RUINED DWELLING

SKHA-CHĪNA

KŌTĀH

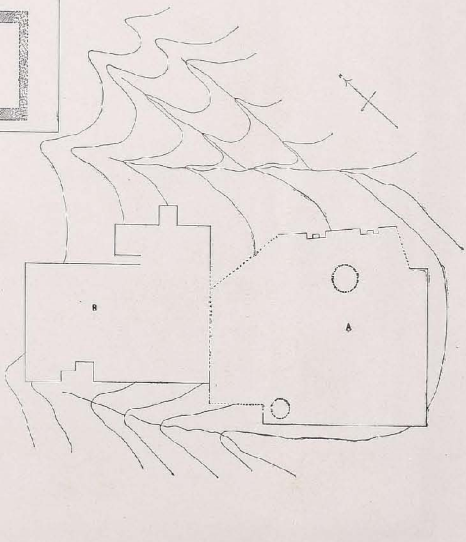


SCALE

ROUGH SKETCH PLAN OF
KANJAR-KŌṬE

MALKIDAM, KANDAG VALLEY

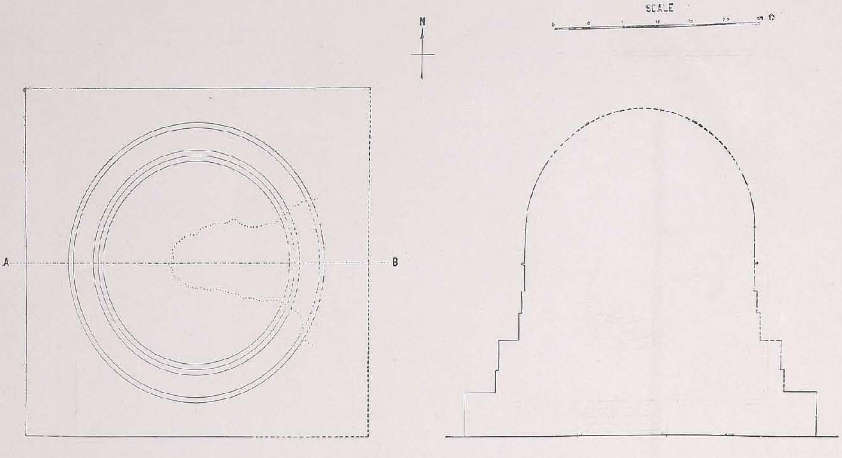
SCALE



PI. 2

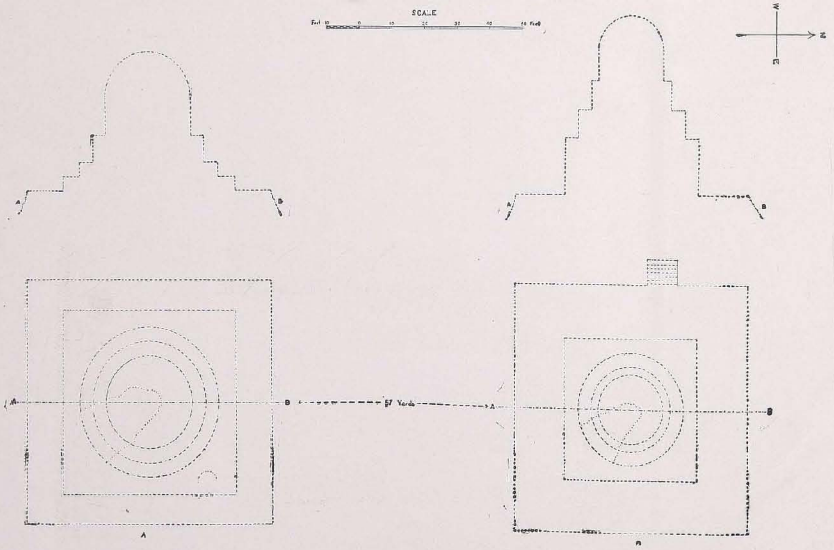
SKETCH PLAN AND SECTION OF MAIN STUPA

GUMBATŪNA



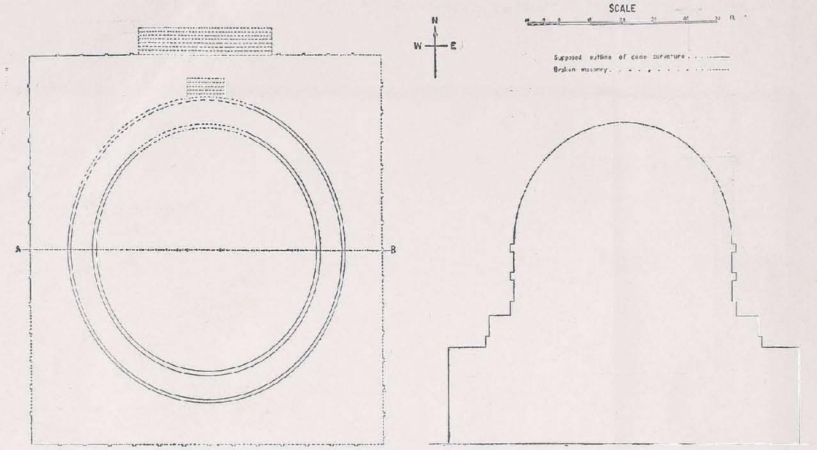
ROUGH PLAN AND SECTION
OF STŪPAS NEAR

BĪR-KŌT



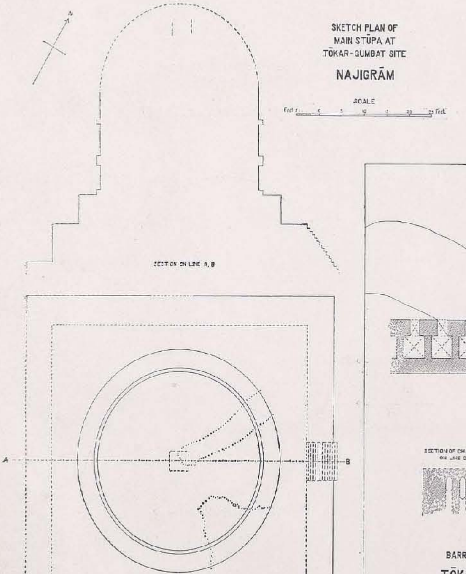
SKETCH PLAN AND SECTION OF STŪPA

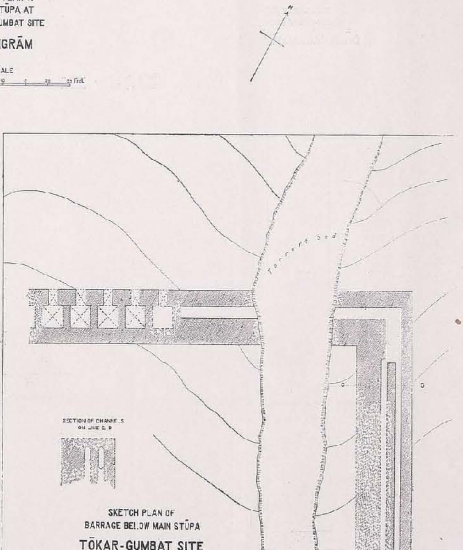
AMLŪK-DARA



SKETCH PLAN OF
MAIN STŪPA AT
TOKAR-GUMBAT SITE

NAJIGRĀM





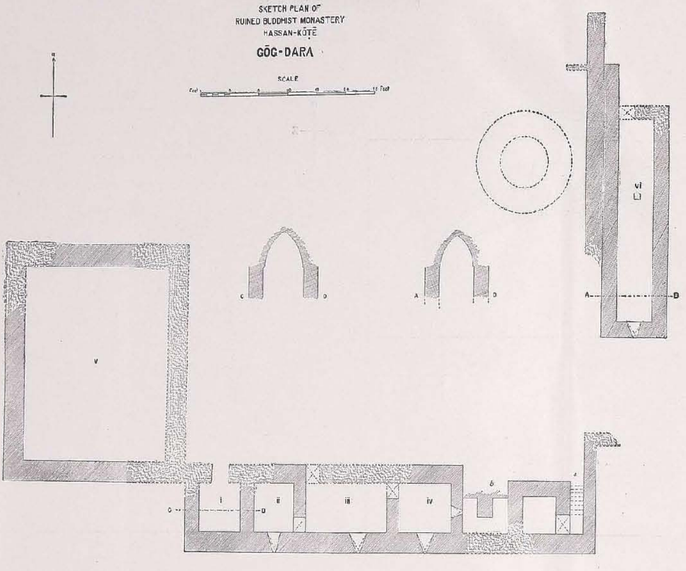
SKETCH PLAN OF
BARRAGE BELOW MAIN STŪPA

TŌKAR-GUMBAT SITE

Pl. 4

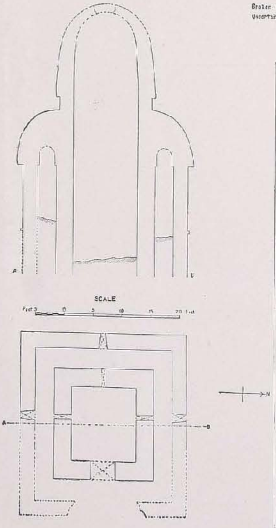
SKETCH PLAN OF
RUINED BUDDHIST MONASTERY
HASSAN-KŌṬĒ

GŌG-DARA



SKETCH PLAN AND
ELEVATION OF SHRINE,

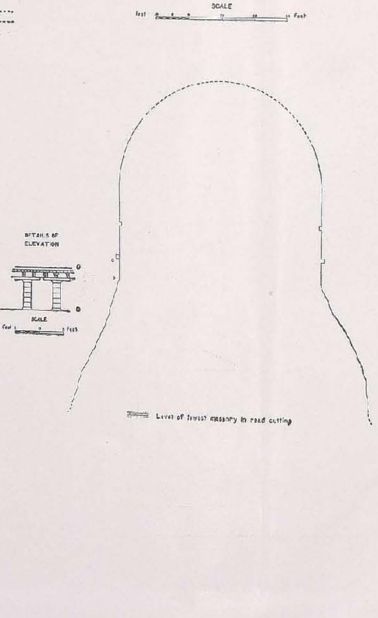
BĀLO KANDAG VALLEY



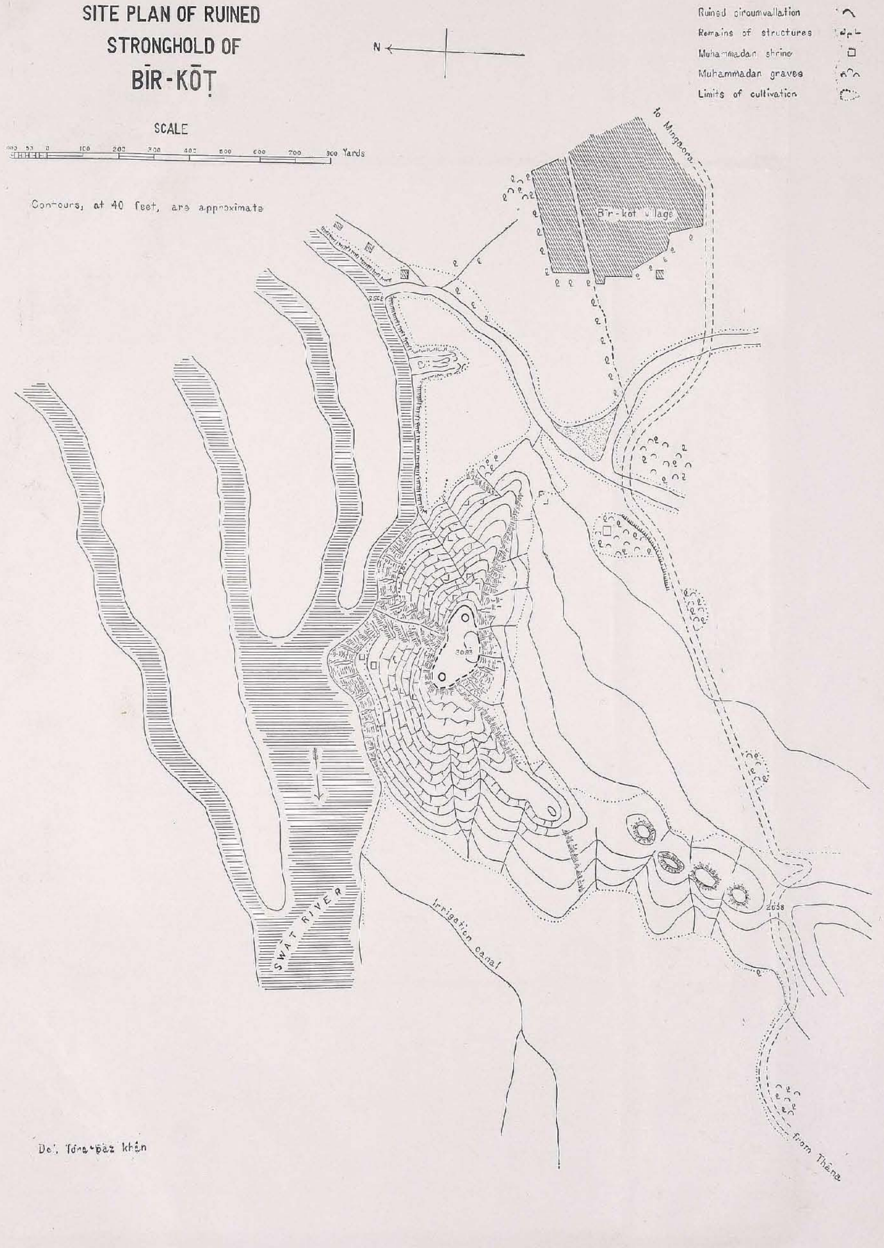
Broken masonry
Uncertain outlines

ROUGH SECTION
OF

STŪPA, SHANKARDĀR

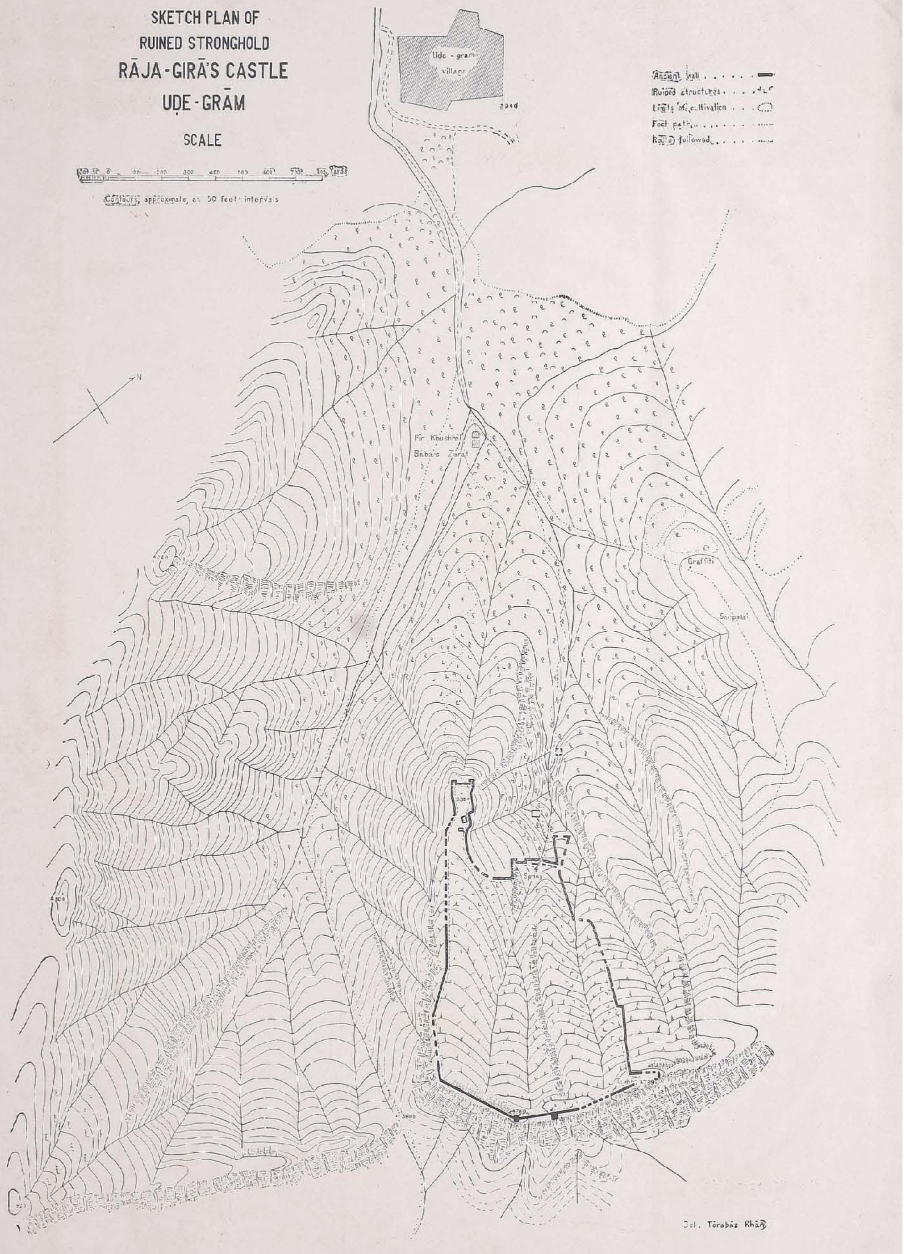


SITE PLAN OF RUINED STRONGHOLD OF BĪR-KŌṬ

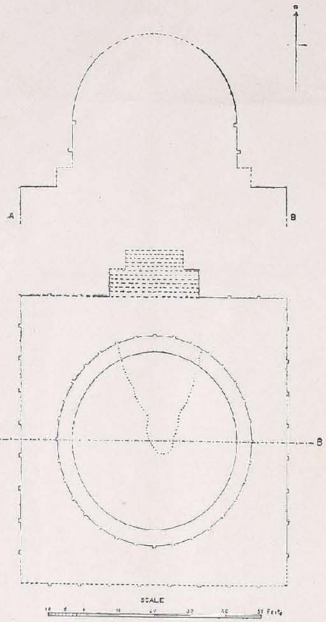


Del. Tura-baz khān

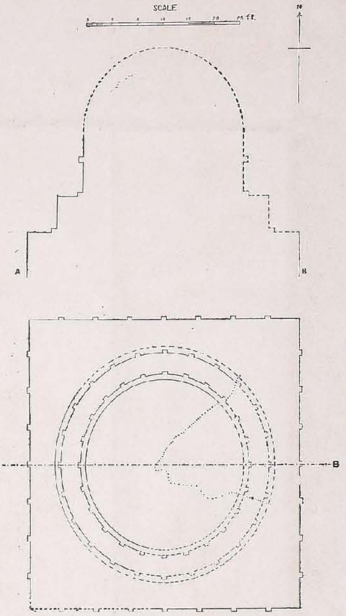
Pl. 6


SKETCH PLAN OF
RUINED STRONGHOLD
RĀJA-GIRĀ'S CASTLE
UḌE-GRĀM
SCALE
Yards
Contours, approximate, at 50 feet intervals
Ancient wall
Ruined structures
Limits of cultivation
Foot path
Route followed
Ude-gram village
N
Pir Khushhal Baba's Ziarat
Graffiti
Sarpatai
Spring
Del. Torabaz Khan

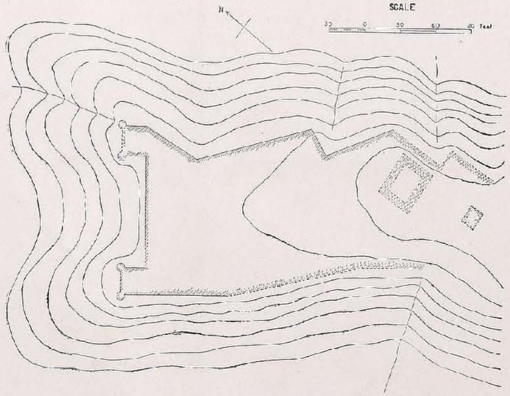
SKETCH PLAN AND SECTION OF
SHINĀSĪ STŪPA
NEAR
BATĒRA



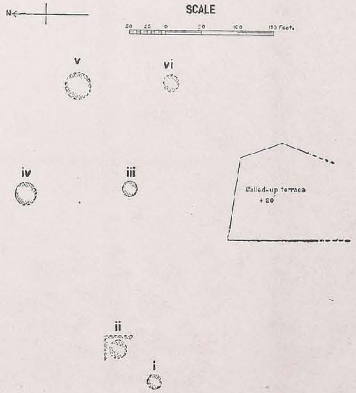
SKETCH PLAN AND SECTION OF
JURJURAI STŪPA
JANBIL VALLEY

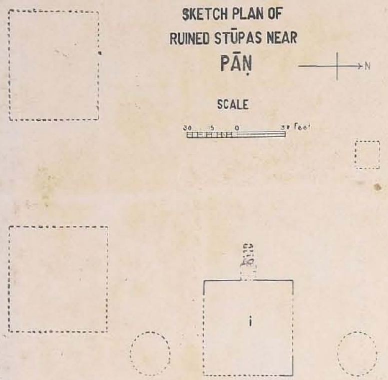


SKETCH PLAN OF NORTH-WESTERN BASTION AND ADJOINING WALLS
RĀJA GIRĀ'S CASTLE ABOVE UḌEGRĀM



SKETCH PLAN SHOWING POSITIONS OF
SHARĀRAI STŪPAS NEAR PĀṆ




SKETCH PLAN OF
RUINED STŪPAS NEAR
PĀṆ
N
SCALE
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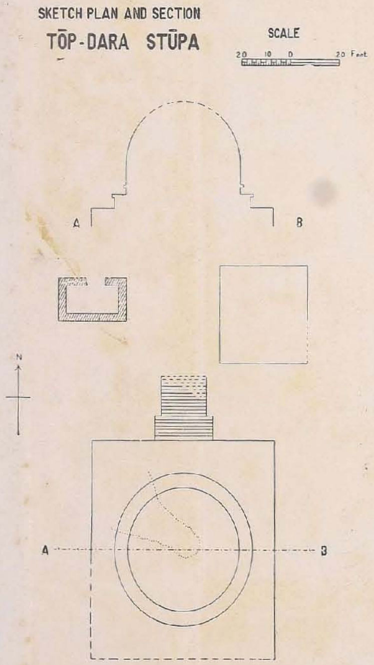
N
SKETCH PLAN OF
KARGHA-ḌHĒRAI SITE
RAGAST
SCALE
70 35 0 70 140 210 Feet


SKETCH PLAN AND SECTION
TŌP-DARA STŪPA
SCALE
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A
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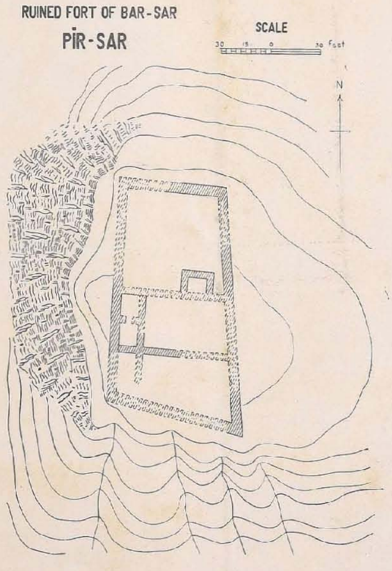
RUINED FORT OF BAR-SAR
PĪR-SAR
SCALE
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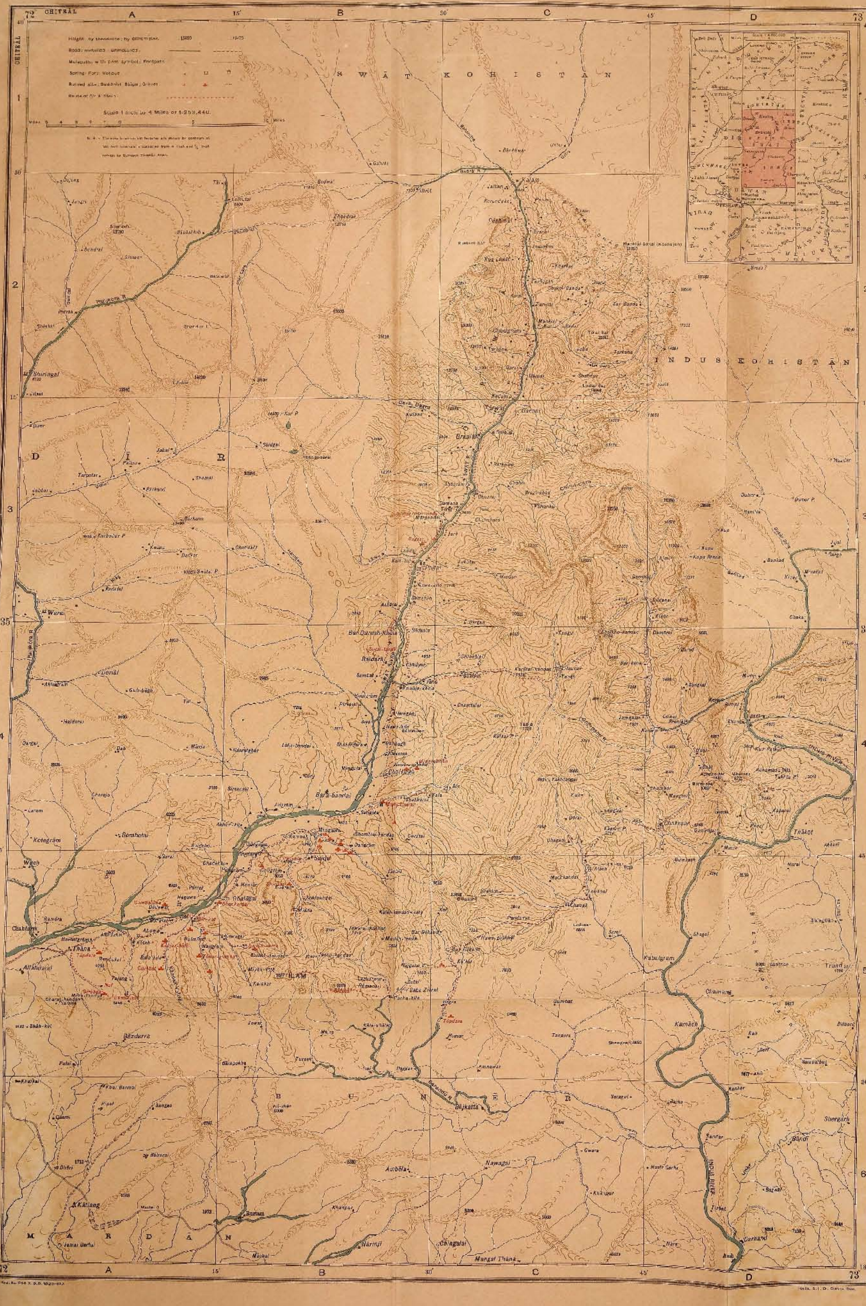
UPPER SWĀT AND ADJACENT TRACTS

INCORPORATING SURVEYS MADE DURING THE EXPLORATIONS OF

SIR AUREL STEIN K.C.I.E.

1926



PĪR-SAR AND ENVIRONS

FROM SURVEYS MADE DURING THE EXPLORATIONS OF

SIR AUREL STEIN, K.C.I.E.

1926